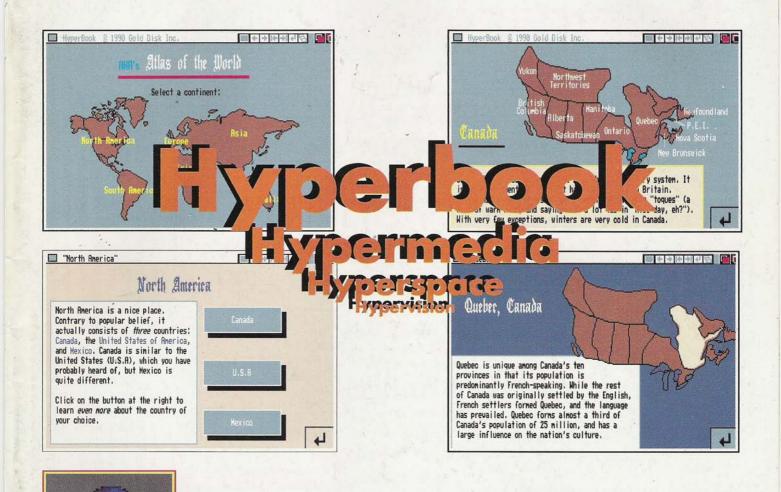
The Australian and AMIGA REVIEW



Cameron Handy SCANNER with OCR Reviewed

MathVISION - Mandelbrot Mathematics

Blue Max . MIG-29 . Blitzkrieg









Registered by Australia Post Publication No NBG 6656

* Recommended Retail Price Only

is Computermate the market leader?

Customer Service



Product Knowledge



Availability |



Product Support



Value |



Largest Range



Australia's Leading Distributor of

Software and Accessories for



Phone (02) 457 8388 Fax (02) 457 8739

BIG ENOUGH TO BE PROFESSIONAL - SMALL ENOUGH TO BE PERSONAL.



The Australian Commodore and Amiga Review

EDITORIAL	A meagre	,		C04 /	128	EL CL	OCATIO	A
RAM RUMBLES	editor speaks! User grou update	2 1p 4	The C64 Column The versatile 64! Sound & Graphics More on sprites GEOS Column	O. James G. Perry O. James	53 42	Playing Games? Thats all they do! 1st Shapes Design toys 1st Letters & Words	A Glover	20 24
NOTEPAD	News &		Mail merge	ΔΜ	34 IIGA	A talking program Mother Goose Kor kids!	A Glover	25 26
The Aus COMM(and AMIGA	info	8	MathsVision Maths as art Hyperbook Easy programming Cameron Scanner B&W hand scanner CLI - part 11 Letters answered	G. Kimpto A. Farrell S. Kenned A. Leniart	11 14 y 18	ENTERI That's Entertainm News, Hints & Tips, H Game Reviews Horror Zombies, Blue Zarathrusta, Blitzkrie Gamesmen Megapal	Hall of Fame • Max, g,	IT 57 61
Selection Honey SCANN Mark VISION : Manual	TILE WITH OCR REVIEWED Labroot Mathematics		Communications Crunching disks Letters Have your say!	J. Scowen Readers		Quick Shots A first glance at new Ilyad, 'Nam, Pro Ten Adventurer's Rea Help, Hints, Problems	games: nis Tour II	64 70

Advertisers Index

Australian Commodore Review: 21 Darley Road Randwick,NSW 2031 Phone: (02) 398 5111 Published by:

Saturday Magazine Pty Ltd.

Distribution: NETWORK Distribution
Printed by: Ian Liddell Pty Ltd
Editor: Andrew Farrell

Editor: Andrew Farrell
Production: Brenda Powell
Design & Layout: Andrew Dunstall
Subscriptions / back issues:
Darrien Perry (02) 398 5111
Entertainment Editor:
Phil Campbell

VOLUME 8 NO. 5 MAY 1991 79

Advertising: Ken Longshaw (02) 398 5111 or (02) 817 2509

Regional Computers

The Amiga Supermarket

SPECIAL: Amiga 2000 Computer \$1479

Printers

L C10-II

LC24-10

LC24-15

LC200CL

LC24-200

GSX200

GSX140

LX 400

LQ 400

LX 850

LQ 550

LQ1010

3.5" DSDD

3.5" DSHD

GSX180D

NX1000CL

LC24-200 CL

LC15

Star

Citizen coloured

Free cable this month

3.5" Memorex \$16.00

Lifetime Guarantee

3.5 Internal Drive \$159 3.5" External Drive 5.25" Ext Drive \$239.99 Action Replay MarkII

\$165.00

Amiga Mouse \$39.99

1 Mb RAM exp A590 \$85

1 Mb Simms exp GVP \$85

Genlock New Type

\$289

Public Domain

Fish 1/490 - Amicus Amigan - T-Bag Faug - Amaz - NZ

17Bit. Amigoz Cost from

S1.49

per disk

Disk Counts

\$ 299.00

\$499.00

\$579.00

\$749.00

\$449.00

\$369.00

\$699.00

\$599.00

\$439.00

\$299.00

\$269.00

\$469.00

\$379.00

\$559.00

\$749.00

\$18.00

????

GVP 42Mb/F A500 Series II \$959
GVP 52Mb/Q A500 Series II \$1169
GVP A2000 HC8/52Mb/Q \$1129
GVP A2000 HC8/80Mb \$1199

☆ Amiga 500 computer	\$799.00
☆ Amiga 2000 Special	\$1479.00
☆ Amiga 2000/40 meg HD	\$2249.00
☆ Amiga 2000 Professional	\$1649.00
Amiga 3000/40	Call
Video Digitiser A500/2000	\$99.99
AT bridge board	\$779.99
Amiga Midi Interface	\$ 129.00
Sound Sampler	\$50.00
Memory Expansions	
5101 D	00000

Memory Expansions	
512k Ram expansions	\$69.99
512k with switch & battery	\$75.00
1Mb A1000/500 extern/0	\$199.00
2Mb A500 Internal/Ax	\$299.00
A500 Base Board 4Mb/0Mb	\$199.00
A500 Base Board 4Mb/0Mb KC XT Board	Cal
AT Once Board Special	Low Price
Modome	

Widdellis	
Maestro Modems 2400	\$265.00
Maestro Modems 2400 Maestro Modems MMPS	\$379.00
Fax Modem Maestro 9600	\$379.00
Action Replay 2000	????

Hard Drives	
GVP A500 40Mb Quantum GVP 105Mb/Q A500 Ser's II GVP A2000 HC8/105Mb GVP A2000 HC8/170Mb	\$879.00
GVP 105Mb/Q A500 Ser's II	\$1559.00
GVP A2000 HC8/105Mb	\$1349.00
GVP A2000 HC8/170Mb	\$1870.00
Amiga A590 20Mb	\$579.00

Hand Scanner IMG Scanner	
IMG Scanner	\$289.00
Hand Scanner A500/2000	\$375.00
Cameron Scanner/Software Typ	e 10 \$699.00
Cameron Scanner colour VIDI RGB Splitter	\$1399.00
VIDI RGB Splitter	\$279.00

☆ NX1000CL \$369.00

Deluxe Amiga 500 Computer	\$1099.00
Video Amiga 500 PC	\$1499.00
Music Amiga 500	\$1199.00
Accelerator Board 68030/2	\$1299.00

This month: Amiga 3000 computer \$4999.00

You never know how low I will go!

018 911 011 or 09 328 9062 PO Box E265, Perth 6001 611 Beaufort Street, Mt Lawley Perth 6050 WA

Editorial

A few months ago I attended the launch of Compuserve in Australia at Fujitsu's head office here in Sydney. It sure was an interesting press conference, with the vast majority in attendence unfamiliar with the service, and mainly representing some kind of business PC publication. And here I was, editor of one of the only home computer magazines in Australia and we're being told Compuserve is used mainly by home computer users. So, I started asking questions. How many modem owners are there in Australia who might use this service? No comment. Why



will this succeed when Discovery 40 and Discovery 80 offered by Commodore seem to be failing in the home market? Answer, because Compuserve is better. Problem is, at the moment, it's not much cheaper. To prove the point, Fujitsu offered all in attendance the option of a four week free trial password to the system. Not surprisingly, only a few accepted this once-in-a-life-time offer.

After that four weeks of use, I can honestly say Compuserve is much better than anything we have here. The trick is, Compuserve doesn't try to be an electronic alternative to every day information sources. Instead, the service offers information you can't get any other way. It also offers powerful research capabilities to access information you can normally find in a set of reference books - only using a computer you can find it much faster. Telecom think that people are going to queue up to pay for database search facilities for an electronic version of the white and yellow pages. Now some well-to-do business people who are not feeling the crunch of Australia's current economic climate might jump at that sort of thing but the mass market appeal is very limited.

tralia's current economic climate might jump at that sort of thing, but the mass market appeal is very limited.

For a start, a phone book is about as fast, by the time you go to the right Discovery page, type in the name at 75 baud - if you're unfortunate enough to still be using the Dicovery 40 service - then wait while it finds the name. Once you have it, it's still not as good as the phone book. You can't doodle on it as you speak to someone. You can't stand on it to reach high shelves, flatten bent pictures, biffo a friend over the head or throw on the fire for heat when it's out of date. Somehow it's little wonder people don't want to pay \$40 an hour for such a service. If you're not on line when you decide you want the number, you've also got to wait while the computer dials in and you find your password, type it in and wait whilst you get logged on.

Compuserve is different. It offers catalogues of products that don't come in catalogues, you can play with car models, mix and match features and find out a price, you can get transcripts from television shows, look up an encyclope?adia, check out a reference listing on newspaper stories over the past ten years, talk to a special interest group about anything from computers to pet rabbits. Let's hope Fujitsu does kick off Compuserve here in a big way. If it works, the gateway to the American service Fujitsu will be offering may be improved to include some information held in a locally maintained computer system. No doubt, with enough users, there would soon be good reason to add some local service providers too. In case your wondering, Compuserve is purely text based. You don't have to waste time waiting for pretty graphics to appear. To help make the system easier to use, there are a number of front end packages which let you choose what you want before you login. Once you're connected, the program grabs the messages and files you want in one hit. With Compuserve available in Australia soon, maybe Telecom will improve their own system and pricing structure.

Andrew Farrell

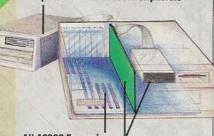
The Ultimate All-in-One Amiga* 2000 Add-on... 68030 POWER+16MB RAM+SCSI CONTROLLER

Replaces up to FOUR "normal" expansion boards!

IMPACT Series II

Now, a 22 or 33 Mhz 68030 accelerator board, up to 16MB of 32-bit wide RAM and a high-performance SCSI hard disk controller in a single A2000® "CPU slot" expansion board!

Optional External SCSI Peripherals



All A2000 Expansion Slots Free

GVP All-in-One Board +SCSI Drive Installed

Check out these features:

- √ The perfect companion for New Tek's Video Toaster.™
- 22Mhz or 33Mhz factory installed, surface mounted, 68030 CPU and 68882 FPU.
- √ Up to 16MB of 32-bit wide memory expansion. 4MB minimum factory installed memory on 33Mhz version, 1MB minimum for 22Mhz.
- ✓ GVP's new custom 32-bit wide, 1MB or 4MB, SIMM32™ memory modules offer flexible, easy-to-install memory expansion. 22Mhz model has 1MB factory installed memory, expandable to 13MB. 33Mhz model has 4MB factory installed memory, expandable to 16MB.
- On-board high-performance "Series II" auto-booting SCSI controller with factory installed FAAASTROM SCSI driver and SCSI connectors for attaching both external and internal SCSI peripherals.
- ✓ Direct DMA access to the full 16MB range of 32-bit wide memory expansion by the on-board SCSI controller. Due to the A2000 bus architecture, this is ONLY possible when SCSI controller is placed directly on the 68030 CPU bus (as is

the case with the A3000!). Provides ultimate SCSI hard disk performance!

- ✓ GVP's legendary FAAASTROM SCSI driver supports virtually all SCSI devices currently on the market, including hard disk drives, CD-ROM drives, Magneto-Optical drives, removable media drives and tape drives.
- Switch to 68000 mode by simply clicking on our new "68000 Mode" Icon, or include our special "mode switching" utility in your startupsequence and select required mode each time system is rebooted, by holding down mouse buttons.
- ✓ Provides the ultimate expandability of your A2000 system. Plugs into the "CPU accelerator" slot, thereby leaving ALL FIVE A2000 expansion slots free for future expansion.

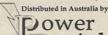
Internal SCSI **Built-in GVP** Series II DMA SCSI Controller **Hard Drive** (3.5" available up to 340MB!) Surfacemounted 68030 CPU and 68882 FPU (22 or 33Mhz) Connector for external SCSI peripherals Up to 12MB of 32-bit wide. User-installable 1MB (22Mhz) or 4MB (33Mhz) SIMM32 Memory Expansion Surface-mounted 32-bit wide



COMPARE:	A2000 +GVP All-in-One	Commodore A2500/30	Commodore A3000®
68030 CPU and 68882 FPU	Y	γ	Y
Maximum CPU clock speed available & shipping TODAY	33Mhz	25Mhz	25Mhz
Maximum 32-bit wide FAST memory on 68030 CPU board	16MB	4MB	16MB
Direct DMA access to more than 8MB of fast memory	Y	N	Y
DMA SCSI controller built-in on 68030 CPU board	Y	N	Y
Number of open Amiga expansion slots with 68030 CPU, SCSI controller and more than 4MB fast memory installed	5	3	4
RAM upgrades through easy-to-install 32-bit wide SIMM memory modules	Y	N	N



SIMM32 and GVP are trademarks of Great Valley Products, Inc. Amiga, A2000 and A3000 are registered trademarks of Commodore-Amiga, Inc. Video Toaster is a trademark of NewTek Inc.



Peripherals Pty. Ltd. Expansion Solutions

P.O. BOX 555, LAVERTON, MELBOURNE, VIC 3028 AUSTRALIA PHONE: (03) 369 7020 FAX: (03) 369 4342



Media Spottings and Applications

Don't forget we're looking both for Commodore computers in the media and at work, in Ram Rumbles this year. Starting next month, the best published letter will receive a free one year subscription to *The Australian Commodore and Amiga Review*.

Now to kick things off - the incredible finding that O.T.C. have not one but several Amigas chugging away.

One machine has an AT bridge-board which captures data from a larger computer regarding every overseas call made by means of a special program and an 8-port serial card. This is transferred to the Amiga and recorded onto one of two 600Mb optical drives, with a 600Mb Fujitsu hard drive handling primary storage requirements. When a customer complaint is received, O.T.C. can interrogate the Amiga to find out what problems occurred at the same time as the reported difficulty in a bid to locate the cause of the fault.

The Amiga also displays a large world map with a flashing red dot pin -pointing world trouble spots in the event of an earthquake or other disaster which leads to a mass call failure - hundreds of phone links banking up with nowhere to go.

Yes, it's all done on the Amiga. More on this installation soon!

Ground Zero

On the 18th of March, Ground Zero was about gas testing at Maralinga. In the movie we see a man loading up a banking program on a 1541 disk drive. Unfortunately the computer was obscured by darkness-but it must have been a C64 or C128, according to our informant Mr A. Gromly of Walkerville, S.A.

PC91

Commodore were obviously missing from this event, apart from a smallish stand operated by the Hard

Disk Cafe. Congratulations folks on a great effort at the show, but surely Commodore's range of machines aren't so unique that they can sit back and happily rely on their own show - World of Commodore, July 12 - 14. Many other manufacturers showed off publishing, presentation and animation packages. Indeed, many stands had live presentations rolling all day. The Amiga could have turned a few heads at this event.

User Group Update

Eastern Suburbs
Commodore Users Group
* NEW ADDRESS *
P.O Box 375
Padstow 2211
Secretary: (02) 779 666
Fax: (02) 774 1165

West Lakes Amiga User Group S.A. West Lakes Shore Primary School Edwin St, West Lakes Contact: Tom Grant on (08) 493690 Meetings: Fortnightly, Sunday 3.00pm.

Gympie Amiga Users Group, c/o Mail Service 183, 8 Rocks Rd, Gympie QLD 4570 Contact: N. Andreson (Sec). Phone: 82 4072 or 825671.

CDTV Movie Reviews

Fancy yourself as the next Bill Collins? VOLITION Software is looking for people who might like to contribute movie reviews for a forthcoming CDTV release, *Ten Thousand Movies On CD*. You'll need to have the time to contribute up to 500 reviews in a period of a year or so, about 10 every week. Once the disc is released you'll be earning royalties on every sale. Reviewers with computers and modems are especially welcome. For more information write to: Movie Reviews, P.O. Box 158, Darlinghurst 2010.

Cursor Curses Commodore Review

In the April Cursor newsletter of the Commodore Computer Users Group Qld Inc, the librarian ever so tactfully points out that in his humble opinion our magazine rates a mere 2 out of 10. He also observes that our covers are always atrocious, and that we never print the year on the cover - a real annoyance for a librarian.

Continued on p6



This update column is coming to you from thousands of miles away. Once again, I am in the UK searching out the latest and greatest in software to bring back to Australia for Pactronics to distribute.

In education software, we have a brilliant new educational adventure, RODY AND MASTICO. Kids love it, because they can control their characters, colour in the screens, save screens, load screens and print them out. It's a brilliant, full colour, icon controlled game that teaches as you play!

Books, books and more books; the Abacus range of Amiga books continues to grow with their latest edition:

BEST OF AMIGA TRICKS AND TIPS. This is a compendium giving literally hundreds of tips on how to get the most out of your Amiga.

Over the last few months, we have witnessed the growing popularity of Strategy / Simulation games. To augment our range, Pactronics now have some of the hottest simulation games around!

TOWER FRA - Airport Traffic Control simulator **ACTION STATIONS** - Naval

Simulator covering the years 1922-1945

THE FINAL CONFLICT World Wide Political Simulator
WHITE DEATH - WW II
simulator of the Russian Front
BLITZKRIEG - Battle of the
Bulge simulator

RORKES DRIFT - Boer War Battle simulator

One final word about AMOS! Buy it! AMOS is proving to be THE hottest Amiga title in town. No other language gives you the flexibility and control offered by AMOS. **Beauty and Functionality Redefined**

THE NEW SERIES IT A500-HD+

The Next Generation in Amiga® 500 Add-On Peripherals



Turn your A500® into a Serious and More Fun Computing Tool Today!

GVP's New SERIES II A500-HD+ is The Ultimate in Hard Drive, Memory and Expandability for your Amiga 500. Major features include:

Leading Edge

Same high-tech custom VLSI and FAAASTROM™ features as GVP's new Series II A2000 SCSI-RAM Products.

Unique new "Mini-Slot"™ brings out all the A500 expansion bus signals, allowing for exciting future expansion options - the only intelligent alternative to risky "Pass-Through" functionality.

Reliability

Includes internal fan to keep you cool and robust power supply ensuring your A500 power supply will not be overloaded. GVP will not compromise on quality and reliability!

Memory Expansion

Internal RAM Expansion up to 8MB using easy-to-install SIMM memory modules.

Sleek

Custom injection-molded styling perfectly matches your A500 for unequaled beauty and elegance, setting a new standard for A500 peripherals.

State-of-the-Art

New 1"-high internal hard disk drive; available from 40MB through 100MB.

Provides no-compromise hard disk performance which until now has never been seen on the A500.

Seeing is Believing

Take one for a Test "Drive" at your nearest GVP Dealer today!

> Call for Special End-User Trade-Up Details!



Game Switch: Enables RAM while enabling full game compatibility. External SCSI Port: Allows up to 7

SCSI devices to be attached 1"-High Factory-installed Hard Disk

Drive: 40MB through 100MB "Mini-Slot": For future expansion options.

GVP's Custom VLSI Chip.

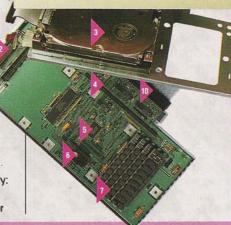
GVP's FAAASTROM SCSI Driver.

Internal RAM Expansion: Up to 8MB

Internal Fan: Keeps you running cool.

Dedicated Universal Input Power Supply: Included.

Reinforced 86-PIN Card Edge Connector



Educational pricing program now available.

nes II. FAASTROM and GVP are trademarks of Great Valley Products, Inc. liga and A500 are registered trademarks of Commodore-Amiga, Inc.

Distributed in Australia by Jower eripherals Pty. Ltd. Expansion Solutions P.O. BOX 555, LAVERTON, MELBOURNE, VIC 3028 AUSTRALIA PHONE: (03) 369 7020 FAX; (03) 369 4342

☆ SUBSCRIBE ☆

The Australian COMMODORE and AMIGA REVIEW

Make sure of getting your copy Subscribe now!

Please enrol me for issues subscription to The Australian Commodore and Amiga Review, commencing with the issue. I enclose a cheque/money order for \$ Please charge my Bankcard Bankcard number:
Expiry date:
Name:
Address:
Postcode:
Please tick applicable box
First Subscription
Renewal
TO: The Australian Commodore and Amiga Review 21 Darley Road, Randwick NSW 2031 (02) 398 5111
Rates within Australia: 6 issues \$19.00 (inc postage) 12 issues \$36.00 (inc postage) Minimum OS postage \$35.00 AUS (Air Mail) more for some countries
If you don't want to cut this out

photocopy it or just send a letter.

NOW

He also states that our program listings are always suspect - strange considering over the last year or more most of the listings we have printed were provided by the Club's President, Greg Perry.

As for our covers, point taken, but then we've always prided our-selves in great editorial which has made possible our survival and indeed amazing growth over the past eight or more years of publication. We're working on the covers - see the last couple of issues!

As for the measly 2 out of 10 rating, I refer to the comment which appears on the very next facing page 13... "Australian Commodore and Amiga Review are making a great effort on behalf of C64/C128 and Amiga. Support them." and on the next page "..read ACAR." Well Mr. Librarian, up your nose with a rubber

EXTENSIVE RANGE OF PUBLIC DOMAIN SOFTWARE FROM UK, USA, AUSTRALIA. EACH DISK CONTAINS MANY EXCITING PROGRAMS FOR ONLY \$5 PER DISK.

SPECIAL INTRODUCTORY OFFER.

5 DISKS - \$20

+ FREE CATALOGUE DISK

- GAMESGRAPHICS
 - UTILITIES
- TUTORIALS IMMEDIATE DELIVERY

PLEAS \$20 CH	E SEND 5 DISK OFFER Q/M.O. ENCLOSED
Please tick your pre	eference(s):
Games	Computing
Art	General
	SE SEND FREE LOGUE
Name:	
Address:	
	PostCode:

Post To::

BRUNSWICK **PUBLICATIONS** PO BOX 458 **BONDI JUNCTION NSW 2022**

AMIGA ANNUAL

Produced by the editorial staff of Australian Commodore and Amiga Review and Professional Amiga User

On sale at newsagents and computer dealers NOW - \$6.95

- ☆ Complete up to date list of software available in
- Australia with description. price, availability, etc
- ☆ User Group List ☆ Fish Disk List ☆ Graphics
- ☆ Word processing ☆ Hard Drives & Communications
- ☆ Music ☆ And lots more!

Commodore 64 **EDUCATIONAL**

SOFTWARE

ORDER NOW FOR YOUR FREE 50,000 ENTRY WEBSTER DICTIONARY

When you're through playing

- ☐ WHIZ KID (QUIZ GAME) 10-ADULT
- ☐ MATH WHIZ (AGES 6-10)
- ☐ TINY TOTS (AGES 2-6)
- ☐ WHIZ SPELLER (AGES 6-ADULT)
- ☐ FREE DISK CATALOGUE

TICK APPROPRIATE BOX/S INCLUDE CHEQUE/M.O. FOR \$29.95 PER PACKAGE OR \$100 FOR ALL AND POST TO . . .

> MILLERSOFT 5 ARGO WAY, AIRDS **NSW 2560**



&

Computa Magic

Shop 5/30 Hall Street, Moonee Ponds 3039 Phone (03) 326-0133

506 Dorset Road, Croydon 3136 Phone (03) 725-6255

(GVP) Great Valley Products

GVP SERIES II A2000 SCSI Hard Card + 8MB RAM Controller. (HC8/xx) (0K)

Series II A2000 HC8/52Mb Quantum \$1160 (New 1 inch high mechanism. 19ms access time)

Series II A2000 HC8/105Mb Quantum \$1360

Series II A2000 HC8/170Mb Quantum \$1750 (15ms access time)

Series II A2000 HC8/80Mb Seagate \$1215 (Deal of the year)

GVP SERIES II A500 HD+ (SCSI controller, 8Mb RAM Expansion, custom mini-slot, perfectly matching case)

Series II A500 HD8/40Mb Fujitsu \$999

Series II A500 HD8/52Mb Quantum \$1250

Series II A500 HD8/105Mb Quantum \$1649

NEW GVP ACCELERATORS

Suit A2000

*68030 22Mhz

*1Mb RAM

*32bit SCSI CONT.

\$ CALL

*68030 33Mhz

*4Mb RAM

32bit SCSI CONT

\$ CALL

All products are in stock \$10 overnight shipping (Australia wide)

12 months warranty on all items 24 months on Quantum Hard Drives

Data Flyer SCSI Interface

Introducing the DataFlyer - offering great performance at a cost attractive price.

FEATURES

-AUTO-Booting

-AUTO-Install software for super easy formatting

 -Non DMA design eliminates DMA problems -Supports Fast File System (FFS)

-Amax Compatible

-Auto-Diskchange for Syquest

-Mouse button defeats AutoBoot

COMPATIBLE WITH ALL MAJOR HARD DRIVES.

DataFlyer A2000 45Mb Seagate \$795 23ms DataFlyer A2000 40Mb Quantum \$895 19ms

BASE Board (0-6Mb RAM for the A500)+Clock

- Simple "Plug-in" installation

Works with Fat and Fatter Agnus

- 4 Megabytes contiguous memory

6 Megabytes contiguous memory optional

Memory may be installed in 1/2Mb increments

- Multi-Layer construcion means it:

- Has perfect data integrity

- Works with any manufacturers DRAM

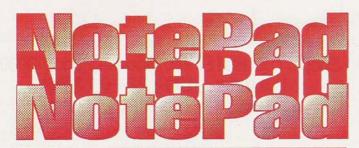
- Works with any combination of DRAM speed (60ns-150ns)

BaseBoard 0Mb \$249 - 2Mb \$449 - 4Mb \$649

What they said...

If you want more than the essential 512K RAM upgrade for your A501 slot or if you need Super Agnus support, the Baseboard system is the way to go.

John Wolfskill Amiga World Senior Writer, Technology



SpectraColor

Software company OXXI have released a new HAM paint package complete with brush animation capabilities. The package looks a lot like Photon Paint, but there are a host of new features. You can easily create a curved path for animations, or alter the shape of a brush during the animation. SpectraColor tweens, morphs and animates - the only HAM animation package in its class according to OXXI - do they know about Deluxe Paint IV?

The program will sell in Australia for under \$150. For more info call Computermate on (02) 457 8388.

1930 Monitor

Now available here for \$649, this Commodore monitor is VGA, not multi-scan (whereas the 1950 is multi-scan).

A multiscan monitor can do all that a VGA monitor can do, but can also do lower resolutions, somewhat useful on a machine like the Amiga with its many possible display modes (if you're going to use them), and the possibility of programming the chip which handles display.

Deluxe Paint IV

Still more improvements have been made to the paint program other paint programs are measured by. Electronic Arts have finally integrated some of the features previously bestowed upon the boring old MS-DOS version. You can now ex-

pect some much slicker graduated fills and antialiasing. There's also support for HAM and productivity modes, along with a special light-box feature for creating hand drawn cartoon animations similar to Disney's Animation Studio.

The whole look and feel of the program has been brought in line with Workbench 2.0, and there's better control over animations. Expect to see a release around the middle of this year.

Schools offered Amiga package deals

In another bid to acquire a bigger slice of the educational market, Commodore are offering a range of packages to schools at extraordinarily good prices.

Including monitor - you can get:

- Amiga Deluxe Pack for \$1290
- A2000 Pro Pack for \$1820
- A3000 Performance Pack for \$465
- PC AT Pack for \$1790
- PC 386 Pack for \$2580

Assorted programs are thrown in to help sweeten the whole deal and kick off the new owners with some immediate useful applications. Let's hope they sell thousands!

Touch tablet

Local software company Serendipity Software have launched a complete Amiga touch-tablet package combining the Calcomp Wiz and necessary drivers for use with a range of software package.

Once in place, the software allows most mousedriven programs to use the touch-tablet as an input device.

For more information contact Peter Skarpetis on 02 449 8133 ext. 283.

Japanese on Videodisk

Temple Industries in W.A. is authoring the code necessary to set up courses for learning Japanese on videodisks, controlled by Amigas. The curriculum is being developed mainly at Curtin University. Three or four more such disks will be developed in the future.

Anthony Temple, the mover and shaker in this venture, also sees a possible CDTV spin-off in the future. If Commodore is smart, they will jump into marketing the product with such things as an Asian keyboard sets and the like.

Graphic Designer

New Horizons Software have issued a challenge to Professional Draw - the structured drawing program. Graphic Designer offers smoothable curves, multiple drawing layers, and flexible text handling and unlimited multicolour patterns. It contains an ARexx port with complete macro language. You can get full control over printing, reduction, enlargement, sideways printing, and print density. You can even get drawings of over 64 square feet.

Only 512K required, and price is US\$125. The product should be available at the end of May.

ProVector 2.0

Another graphics package with similar features; this one features multiple

level "undo", "layers" system, and text flowing on any path. Compatible with WB2.0, and has the ability to save files in ProVector (IFF-DR2D), IFF-ILBM, HP-GL or Postscript formats, and a dithering routine to simulate 256 onscreen colours. ARexx - compatible.

Price is US\$ 299.95 from: Taliesin, Inc., 1327 Corte De Los Vecinos, Walnut Creek, CA 94598, USA. Tel: (415) 2561195.

Newsflash disk magazine

A disk magazine with a difference, Newsflash is now available. As well as regular editorials, it has programs, utilities, creative art, music, demos, and other notices. It also includes a world wide message bank, a special service for readers. Quadrant Computers (09) 375 1933. (Dealer and retail enquiries welcome.)

Pagestream qwikforms

The Sterling Connection, who also have a bunch of spreadsheet templates for home and small business called Templicity, have created over 100 adjustable layouts for PageStream, including invoices, inventory control, order forms, purchase orders, job estimates, legal forms, etc. For more information call Computermate on (02) 457 8388.

PowerPacker Professional

You can't pump up a disk, but with PowerPacker you can compress its contents into less than two-thirds the space otherwise required for storage - on floppy or hard drive.

PowerPacker uses sophisticated crunching algorithms to reduce the size of files, allowing about 40% more material to be stored.

Continued on p10

PGATOUR GOLF

The pressures of a

- PGA TOUR Pro

 Play on authentic Tournament
 Players Club courses.

 Compete against 60 PGA
 TOUR Pros in four round
 tournament play.

 Track your own stats in real
- Track your own stats in real PGA TOUR categories.
 Fight to finish in the money.



ELECTRONIC ARTS

By Sterling Silver Software

Distributed by: Electronic Arts Pty Ltd Unit 4/52 Lawrence Drive Nerang 4211 Queensland Telephone (075) 96 3488

AMIGA®

RRP \$39.95. For more information Quadrant Computers (09) 375 1933. (Dealer and retail enquiries welcome.)

Amiga stargazing

An astronomer called Mighell from the Netherlands developed an Amiga-VAX corroborative software/display setup for counting stars. The Amiga links to the VAX as a low-cost display of the serious number-crunching done by the VAX. Mighell chose the Amiga over the competition for its graphics and multi-tasking. Oddly enough, I found this report in "PC User" magazine, a publication which ignores Amigas as much as possible!

Xcopy mystery unravelled

There has been some confusion about this program - there was a PD disk called XCopy on some PD catalogues with a letter which described how a programmer had been "ripped off" by Cachet Software (the authors of Xcopy3).

The programmer said he had written a new version and Cachet had refused to pay him, so he was releasing it into the PD. In the words of Martyn Brown of 17-Bit Software in the UK:

"After talking to the director of Cachet Software (who also happens to be the author of Xcopy) I can clear up the situation.

"The version of Xcopy in question (2.3) is an illegal and unofficial version that has had features added, commonly called a "hack". Cachet Software did not ask for this work to be carried out - it appears that the programmer in question added the features and sent it to Cachet, who rejected the "new" version. In which case the programmer has no case.

"The latest official version of Xcopy is Xcopy3 Professional, including all sorts of correct, working features and is the only one recommended by Cachet, Cachet assume no responsibility for misuse when using 2.3 and have said that use of some of the added features can actually harm the disk drive.

"So the disk has been removed from some PD lists, and we urge all PD distributors to do likewise."

Controller for 2.5" and 3.5" hard drives

Released by ICD, Inc., it is called AdIDE, and is an autobooting IDE (Intelligent Drive Electronics) hard drive controller. Fits into any Amiga under Kickstart 1.2 or higher. Also compatible with other devices on the external expansion port and lets you boot from external flopppies when required. Said to be the smallest host adapter for the Amiga.

Price US\$159.95 - info from: ICD, Inc., 1220 Rock Street, Rockford, IL 61101, USA. Tel: (815) 9682228 - or try Maxdrive Systems on 008 076 301.

HI-TEK MONITOR FILTER COMMODORE 1081: 1084: PHILIPS 8833: 8854: ALL OTHER TYPES TO ORDER Our high quality filters are made from optical quality 3mm Acrylic specially tinted. It's unique filtering qualities have been extensivelly tested and approved by Amiga user groups, doctors and government offices. \$39.95 inc P&P Made in Australia 10 year guarantee ■ TOTALLY ELIMINATES MONITOR GLARE. ■ RESOLVES LONG EXPOSURE ADVERSE EFFECTS. ■ PROTECTS FROM R.S.I. EYE STRAIN. ■ ENHANCES ON SCREEN COLOURS ■ INCREASES IMAGE SHARPNESS. ■ MAKES INTERLACE MODE VIABLE. HARRIS HI-TEK PTY. LTD. 19 Maloney St, Blacktown, NSW 2148 Tel: (02) 671 1856 MONITOR TYPE PAYMENT: PLEASE INDICATE METHOD PLEASE DEBIT MY VISA - MASTERCARD - BANKCARD CHEQUE - P.O. SURNAME INITIALS SIGNATURE ADDRESS POST CODE

ATonce

The Ultimate IBM-AT-Emulator for the Amiga 500

AT a price you can afford

\$549

80286 processor
704K + 8M Extended/Expanded memory
6 times faster than XT Bridgeboard
Boot from any hard drive
Support all Amiga hardware
Multitasking
Copy from DOS to DOS with supplied utility
Norton SI 6.1
VGA-EGA-CGA Graphics
Adaptor for A2000 available soon
Dealers required

Fonhof Computer Supplies

64 Cross Street, Baulkham Hills NSW 2153 Phone (02) 639 7718 Fax (02) 639 5995

The colourful world of

MathsVISION

by George Kimpton

ake a bunch of numbers, plot them, colour them and view them from anywhere you like and you have the principle behind *MathVISION*. Trigonometry, boolean algebra and recursive formulas never looked so good.

I am sure there are times when, like me, you have found mathematics either plain boring or frustratingly incomprehensible. Then along came Mandelbrots and Fractals. Still incomprehensible, but fascinating pictures. Instead of seeing masses of boring numbers we see magnificent swirls of colour patterns which represent ranges of numbers.

The experts tell us these are all part of the Chaos Theory of Mathematics where seemingly random happenings are in fact mathematically predictable. This branch of mathematics is regularly being used to create scenery using products such as VISTA. The resulting IFFs can be used as backgrounds in paint programs, or as textures in ray-tracing or animation packages.

People are even proving that normal objects such as a flower or leaves can be described mathematically and can consequently be drawn by a computer. *MathsVISION* actually provides the formula to plot a flower. In other words I think they are trying to tell us that everything in nature can be described mathematically. (*Apart from Commodore Review contributors - Ed.*)

Applications

Some game programs in fact do use fractals for scenery and even

Distributed by:

ComputerMate 02 457 8388

RRP:

Amiga \$289.00

create individual trees, plants, rocks, etc. to provide the right background. The artists among us now can also easily use programs like VISTA to render mountains, rivers, clouds and all those things necessary for good backgrounds in art work without the usual hard work.

The only problem is that we don't really understand what we are doing and how to get exactly what effect we want. Well, with *MathsVISION*, we can get a little closer by introducing our own math formulae into the program and then controlling just how it will be displayed.

We can either have the simple X,Y plots we are all used to or colourful contour or perspective plots. Thus we are capable of evaluating functions with one or two variables by displaying the results of our formula on screen in full colour and in 3-D if necessary.

Requirements

MathsVISION system requirements are fairly basic; 512k of RAM (more is faster), one disk drive, although two are better, and Workbench 1.2 or higher. Provision is made for hard disk installation and different versions of the program are supplied for an accelerator board.

AREXX is also supported and covered in a special section and tutorial.

In the author's own words: "MathsVISION is a tool for viewing mathematics. Its pictures are pictorial representations of mathematical expressions and data. It provides many different techniques to visualise any mathematical expressions and data." It also seeks to stimulate new insights into the behavior of the phenomenons being studied.

It allows the use of colour cycle art and provides the ability to animate functions and to explore Chaotic Functions such as the Mandelbrot set, Cantor set, Lorenz equation and bifurcating formulas all in full colour.

Wow, what a mouthful, but it sounds fascinating doesn't it.?

MathsVISION has a sophisticated graphics interface which allows you to choose definitive limits over which a function is to be evaluated without entering specific data. It also allows you to choose the form of display to give the best visual understanding of the resulting data. It then allows you to analyse that data easily with a zoom facility and cursor readouts on screen.

The basic X,Y or simple plots are for single variables. When we use the contour or perspective plots we are really moving into the multiple variable fields. Each contour is displayed as a different colour. Contour colour and width is selectable through something called a "Modulo".

The Function itself is entered as "Val" in the Edit screen. The Variables, from FA to Fn, which control the function are also entered via the Edit Screen. The other parameters and plot controls are through pull down menus.

The results of the Contour and Perspective Modes are displayed as colour contour patterns on your screen with some staggeringly beautiful patterns if the formula and the functions it uses are right. However even with the most mundane formula there can still be some beautiful re-

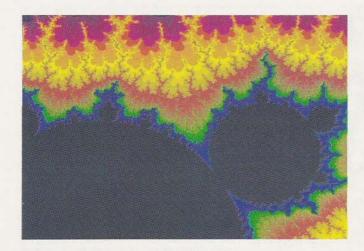
sults. The results can be saved to disk or printed out.

Practicality

Yes, you say, but how does this help me with working out my investments or that rather complicated project that's driving me mad at present? Well, in any of the display formats you can use the Analyse Cursor which allows you to move around the screen or graph and automatically read out the resulting parameter values that correspond to the cursor position.

Tutorials take you step by step through the working of very simple formulae concerning electrical power or the calculation of sales tax on an item for sale. This is handled as a single variable in the simple format and in a two variable format as a contour display where you can move your cursor around and find the resultant of varying either price or sales tax.

There is even a tutorial which shows you how to determine the optimum investment and way to invest your hard earned savings to achieve





while every cent counts these days.

Considerable care is given in this tutorial to teaching you how to organise the data of your problem to minimise taxes and optimise capital gain and then devise a formula that will give you the information you need. A ten left just too much out. Maybe if I allow you to experiment with them. scan of the resultant graph in the Analyse mode allows you to optimise writing this article I could have even- mathematical sounds if you should so your investment.

Problems

Quite complex formulae or functions are possible using the edit screen but you must learn to use MathsVISION's own peculiar format and rules to enter your calculation or tures using mathematics and are prefunction and variables or watch out.

One thing that is very frustrating with this program is that there are times when you do not know if the a completely rewritten manual or a

the wiser.

All is pretty straightforward up to mathematician the remaining pages may be easy to follow but for me it oftually fumbled my way through in a wish. month or so.

professional or someone who likes a type. If you like to produce pretty picwin through.

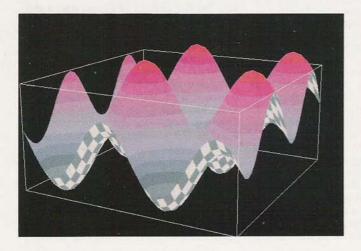
What this program badly needs is found.

a stated goal. Just what we need parently happening and you are none draw a Spleenwort Fern frond and even supplies the formula to do so.

Other preplotted screens show a this point but beyond this the manual magnificent Mandelbrot and some tends to fall down. For a practising other plots with very interesting shapes and colour patterns. Formulae and functions are again supplied to did not have a deadline to meet in There is even a means of producing

This is where it all comes apart This program is definitely not for though - try as I might I could not the casual mathematician unless you bring up a resultant screen plot of the stick to basic calculations, it is for the fern. After clicking on Plot I was faced with a black screen with the usual challenge or collects programs of this snooze balloon showing that the computer was busy for some time. Finally the snooze disappeared and the pointpared to persevere you will probably er came back but no fern. I flipped screens but it was nowhere to be

What the manual does not explain computer is working or not, and if it new supplement. I feel sure it has tre- very well is the fact that you need to is not working, did you do something mendous potential as the preplotted have some specific "Hooks" up and wrong. It sometimes just sits there screens show. One screen actually running to make these things happen and smirks at you with nothing ap- shows how you can mathematically and it doesn't say what happens with





RapiSoft

the wrong ones running.

Hooks are specialist sub programs for specific data manipulation purposes. This is discovered through diligent re-reading of the manual but it still doesn't tell you which ones are needed or the procedure to load them after you have started MathsVI-SION running. The old hand remembers the (Amiga-N or M) method but a new chum might not.

Other things can also cause a lack of display. Determination to make the program work and a number of blank screens finally led me to experiment with scaling and magnification factors - and Bingo!, a display at long last on some hitherto un-

seen plots.

There was also a mysterious "Z" which appeared when I tried to adjust the angle of view in perspective mode with some formulae. This was apparently telling me to zoom in if I wanted to see anything at all but not a word in the manual.

The manual also tells you to browse through the examples on the Pictures disk. Something was missing again - for clicking on icons from Workbench did not produce any results when I tried even

with the program running.

However it was possible to view some of these preplotted pics when running the program, through the load requestor. These were enough to whet the appetite to press on and do my own thing with my own formula. Unfortunately the results were somewhat disappointing. Perhaps with more time I will have better luck.

Conclusions

I believe this program has much to offer if one could only get into it but it needs a better manual, one the ordinary person can follow, otherwise, in its present format, it will appeal only to the mathematicians or those who like a challenge. It will of course still help and satisfy those who are satisfied with fairly basic maths analysis and manipulation.

For those who are prepared to persevere I suspect the rewards will be great with some fascinatingly beautiful screens, such as the Julia Mandlebrot demo, once one learns to master the dreaded "Hooks". These hooks seem to have some mysterious protocol whereby loading the wrong one cancels

others out.

Unfortunately, it is by no means clear from the manual which does what and which are absolutely necessary for specific projects. In fact there is practically nothing said about the demos except for some cryptic remarks on the Edit Screen when the appropriate formula is loaded.

The Amiga may be user friendly but this program, or maybe it's just the manual, is not. Well, good luck with MathsVISION if you should decide to take a chance with it and if you succeed drop us a line and let us know what you found.

The Ultimate Games Pack

Introducing the Public Domain offer of the year! This fantastic package of Amiga software contains eight disks full of the latest Amiga Public Domain games! Everything from action, strategy and adventure games to role playing and trivia games. All you'll ever need!

Enjoy hundreds of hours of game playing for just 68 cents per game! If you were buying 40 commercial games,

you would expect to pay around \$2000!

All games come with documentation and are easily loaded from the Workbench or CLI; ideal for any Amiga user - novice or experienced. All software has been extensively tested for viruses.

Contents of the pack:

Action Games: Air Ace II, China Challenge, Destination: Moonbase, Downhill challenge (Skiing), DriveWars, Humartia, MirrorWars, Missile Command, Rings of Zon, Running, Sealance, Space Wars, Sys, Tron.

Strategy Games: Blackjack, Conquest, Headgames, Imperium Romanum, Logic, Miga Mind, Monopoly, Obess-o-Matic, Puzz, Rubik Cube Solver, Seahaven, Steinschlag, Tetris, The Brain, Triangle, Triple Yacht-Z, Train, Tripppin, Up&Down, Welltrix, Yawn!

Quiz Games: Hollywood, Quiz (Bible, States, Physics & other quizs).

Role-playing Games: Mechfight, Metro.

BONUS: Cheatsheet: Cheats, hints, passwords & solutions to hundreds of commercial games!

Nearly all the games from the last 100 Fish Disks are contained in the pack!

Rapisoft's P.D. Library now consists of:

Amicus, Amigan and Fish Disks (up to 470), GIF Picture disks and demo disks. All only \$4 each!

Pleo	ise send me the following:
	s of the Rapisoft Catalogue Disks @ \$5 each
a copie	s of the Ultimate Games Pack @ \$27 each
	que/Money Order for \$: Bankcard Visa MasterCard
Exp Date : Name: Address:	Signature:
Suburb:	Postcode:



More powerful than a CanDo. Able to leap tall applications from a single hot point. Faster than a speeding AmigaVision. Look! In the drawer, it's a book, it's interactive, it's Hyperbook!

Andrew Farrell crammed into a phone booth to file this hyper report.

es folks, here at the synapse snapping edge of time, Gold Disk are breaking new ground, releasing products they haven't advertised for six months, haven't taken hundreds of orders on already, and that do work without any hidden bugs. However, Hyperbook is not a new concept. Why, it's been hyped up before with products like CanDo, AmigaVision and even the likes of UltraCard. And of course, in the Apple Mac World with products such as the original Hypercard and Supercard.

Hyper software lets you jump around, madly flipping from one unrelated fact to a picture to another fact to a different bit of information and then back again. It's around the encyclopedia in eighty clicks of your rodent.

Hyperbook is all this and more. But seriously, from stand alone applications to interactive hyperbook presentations, Hyperbook offers a smart interface and reasonable power to

make it all possible.

Imagine a Hyperbook World Atlas. Looking at a map of the world you click on a country of interest. Next up you're viewing the states of that country, you choose one and click. This time you're presented with a picture of the capital, charts on the population and other key facts and a graphic showing the population growth over the past ten years. You click on the graphic and you get to listen to a speech by the prime minister given at the most recent meeting of government.

This is hypermedia. The same program could design applications, running stand alone on your Amiga without the main *Hyperbook* program. We're talking phone books, appointment managers, educational software, games ... you name it. *Hyperbook* is not everything *CanDo* is, but what *Hyperbook* can do, it does with

style, ease and elegance.

Installation

Inside your hyperbox there's two disks contained in the usual "if you break this seal and live packet we will have to kill you", with all the relevant license details that go along with that.

There's also a handy guide to applications area. This was the first book I read. It really threw some light

onto the potential of this package. The 148 perfect-bound user manual has a cluttered look, but is nevertheless filled with useful examples and plenty of explanations.

Installing the product is as simple as every Amiga program should be drag the icon to the drawer you wish to contain the application. It will help immensely if you also have a copy of AREXX on your system - AREXX arrives standard with Workbench 2.0 or you can buy it as a commercial

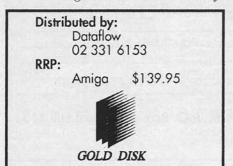
product.

For those unsure, AREXX provides the interface required to allow programs with an AREXX port to with communicate each AREXX has a programming language of its own, and each application running with AREXX adds its own commands. In essence this means you could tell Digiview GOLD to grab a picture from a spreadsheet program. These sorts of capabilities allow amazing hybrid applications to be developed. The limits of one program can be filled in with the power of an-

With this in mind, and the fact *Hyperbook* boasts a very large AREXX command set, and you begin to see the power of this program stretches well beyond the interface we're about to take a look at.

Inside the Hype

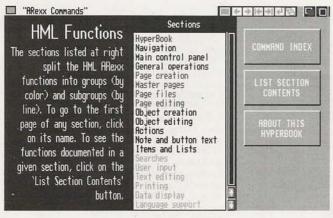
When you first launch Hyperbook the screen opens with a large blank expanse waiting to be hyped up with books. To the right is a bunch of tools for constructing the hype and there is an array of pull down menus. The interface looks Workbench 2'ish and has a slick, smart feel. Everything happens quickly and smoothly.





Editing a "Hotpoint"





Arexx manual

It's best to start by having a look program settings can be altered. at one of the example books included on the second disk. If you have AREXX, (Hyperbook will run AREXX for you if it's there), you can also try out the applications. These books are tatched to parts of a Hyperbook applimore complex and include functions which modify the book, work with files and data.

A quick guide around the menus must begin with the standard Project menu; from here you can LOAD and SAVE a book or defaults, print pages, iconify or shrink the window down to a tag on Workbench or empty the BIN which is kind of like clipboard, but different. The programs file requestor is F.A.B. (Farrell Approved Build). All available devices are listed, and the option to sort the list is included. It is fast and easy to use.

On the page menu you can create, delete, edit, load, save and merge pages - or screens in real terms. Many pages, or just a few depending on the perbook's tool bar may be positioned

hyper book!

options on text, objects and pages. You display a picture or delete a file. For fast development of hyped up books your favourite wordprocessor rectly from Hyper-From Preferences menu,

interface. You can create, save, load and edit macros or issue a single command. AREXX macros can be at-

AREXX provides the interface required to allow programs with an AREXX port to communicate with each other

Tools and Gadgets

Although defaulting to the standard right hand screen position, Hyrequirements, make up a book. In wherever you wish just by grabbing this case, because you jump around the top bar and moving it around.

Tool functions include; Read the Hyperbook; Edit; Bin; Group; First/Last/ Next/Previous page; Contents; Reto turn page; Create Note; Drawing or List; Create Button; Picture or

Page.

Creating a page is simple. Choose create page and then fill it with all the information you want on it - pic-

the pages, it's a tures, text and buttons. Any standard IFF file can be imported. Hyperbook There's a host of keeps an original copy in memory, the whilst allowing a portion or the entire Command menu original to be scaled and placed on for dealing with the page. Later on you can easily crop, move and size the image. Text can can be placed in a similar fashion, read and edit text, with excellent control over fonts, formatting, point sizes and styles. Hyperbook receives top marks in this area.

All types of boxes containing any kind of element may be turned into a you can also run hot point. When you click on one of these defined boxes, Hyperbook can be instructed what to do. Using the paint program di- standard requestors you can trigger one event. With help from AREXX you can trigger several. Normally you will want to jump to another page, howevdozens of default er other possible actions include; gram settings can be altered. Show Picture; Display Text; Go to The last menu handles the AREXX page; Show/Hide; DOS Command or AREXX Command.

> With all these options up your hyper sleeve the world of hyper media opens up along with the possibility of including a host of effects such as music and sound not directly sup-

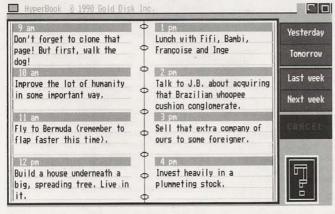
ported within Hyperbook.

A small selection of drawing tools enable simple diagrams and graphics to be created within Hyperbook. The graphic elements are handled in the same fashion as a structured drawing program, meaning you can easily modify the image later.

Conclusions

Hyperbook is brilliantly designed. It is simple to use, works quickly and intuitively. I would recommend it for developers of graphic intensive education products, teachers, and professionals for presentation work. With the right graphics, text and sound, Hyperbook has incredible potential. Well done Gold Disk.

Let's see some local applications for this package real soon now. Much of the potential of Hyperbook lies in the uses to which it is put.



Diary application

Cameron Handy Scanner

cable which attaches to either interface with a DB9 plug.

The scanner is palm sized with a green plastic window mounted in the head which lets the user see through to the material being scanned. The window also defines the maximum scan width of 105 mm. On the left is a three position switch which selects a resolution of either 200, 300 or 400 dots per inch. On top of the unit is a large oblong button which turns scanning on. A red LED mounted inside the scan head lights to

Handy Painter

Cameron supplies a scanning cum picture editing program called *Handy Painter*. The first time I ran *Handy Painter* off the master disk the menus came up in German - the program can be installed in a number of languages including English.

The paint program has a full suite of editing tools for zooming, cutting, pasting and filling parts of a scanned image as well as an array of drawing tools like lines, boxes and circles. The program uses all available ram (chip and fast) for its picture buffers so very large images can be manipulated. The downside is speed. When running a four bitplane, 640 * 400 interlace screen the software grinds along very

slowly.

A one megabyte machine is marginal for running high resolution screens and scans. I was booted out of the program many times with out of memory errors fortunately the program can save work in progress if the memory mark is overstepped. Beside running out of RAM, I also found the program to be rickety in the reliability stakes. It would often hang or guru inexplicably. Once a scan was on the screen the best part of using Handy Painter was leaving it for something easier to use and more robust like Dpaint III.

Black and white mode on the type 10 was excellent for snaffling up simple line drawings and can be used to build an impressive clip art library. But the most stunning results came by using the

dithering and grey scale rendering ability of the scanner and the paint program.

Photographs are continuous tone images meaning they are made up of an infinite number of grey shades between black and white. The Cameron Type 10 scanner can differentiate 16 levels of grey through dithering (changing dot densities to simulate shades of grey). The software is capable of rendering the dithering into "real" grey scales by using a 4 bitplane, 16 colour screen. (This is not good enough for professional use which requires 256 grey scales - Ed.)

Processing a scanned image into greys takes time and reduces resolution (and picture size) by a factor of four. It also uses a lot of memory. On a one meg machine the maximum sized image able to be scanned and processed into greys is around 55 mm by 55 mm. The software allows the user to specify the limits of a scan and will automatically set the maximum allowable dimensions for available

All this means that the Cameron Type 10 can scan a black and white or colour

by Stuart Kennedy

Just when you thought it was safe to close up your wallet there is a new must-have peripheral in town - the scanner. This image and text sucking widget is fast becoming the darling tool of desktop publishers, CAD jockeys and database maintainers.

Scanning is also great fun, especially for playing video voodoo with friends, enemies or on yourself. Feeling vindictive? Just scan in a picture of that ex girl/boyfriend or pesky relative and video hack their anatomy into

amusing shapes.

In the US, the market for scanners more than doubled last year and the giant PC compatible market has become very well served with devices ranging from simple, low resolution, black and white scanners costing several hundred dollars up to US\$15,000 systems able to scan and deci-

pher the Dead Sea Scrolls.

While scanners are being thrown at IBM compatible users, scanner offerings have been thin on the ground in Amiga land. The reason is that while a few scanners transmit data over the universal serial or parallel ports, most use either a SCSI interface or the GPIB/IEEE-488 bus. For a manufacturer wanting to sell an Amiga product compatible with the large Amiga 500 market this means having to do a software port and designing a special interface.

Fortunately Germans like the Amiga and have bought it in large enough numbers to entice German scanner manufacturer Cameron GmbH into producing a range of machines which will work with the 500 and the 2000+ series. Models range from a simple 200 DPI black and white model to a colour unit able to scan in 4,096 colours.

I tested the Cameron Type 10 hand held scanner which has switchable 200/300/400 DPI resolution, a large 105 mm scan width (most hand held scanners have a 64 mm scan head) and is capable of producing 16 grey tones as well as black and white.

The unit comes with two interface cards: one for a 2000+ Amiga which fits into a vacant 2000 slot and an Amiga 500

interface which hooks on to the expansion connector on the lefthand side of the computer. The scanner has a long 1.7 metre

tell the user that scanning is in progress. There is a contrast wheel on the right and a four position switch which selects between black/white or three levels of grey scale dithering.

So how does it work?
The quickest way to move
an image from the desktop
onto the screen is to run the
supplied demo program. Find a
picture, hit the big grey button, and
drag the scan head over it. Bingo. A
black and white rendered image appears and a whole new world of plagiarism opens up.

Lameran

The first surprise for a scanning novice is that the screen image is much larger than the scanned picture. Increasing the DPI makes the image even larger. It's all a matter of screen resolution and dots per inch. Resolution of a scanner is determined by the number of dots the device can sample per linear inch of document. Image symmetry and clarity is best with the screen in 640 x 400 interlace mode.

Continued on p18

BUSINESS HOURS Mon to Friday 9AM to 4.30PM

Phone: (06) 288 0131 Fax: (06) 288 0337

24 HOUR SERVICE



PO BOX 9 **RIVETT ACT 2611**

C64 / 128 SUPERBASE/SUPERSCRIPT PACK

The ultimate in data base and wordprocessors for the 64/128 computers. This package includes Superscript, Superbase and Superbase-The Book. These programs are by far the most powerful available for the C64/128 computers and are suitable for small to medium businesses, as well as for the home, clubs, schools etc. Both packages include Superbase V.3, which on the 128 supports the 1581 disk drive.

Great value at

Superbase/Superscript Pack 64 or 128 \$130

A. Selin Okl WHY CHOOSE BRIWALL?

LOWER

EASY LEDGERS

MAXIPLAN NAG PLUS VGOLD PEN PAL

SUPERBASE PERSONAL 2 S/BASE PRO V4 (NEW) WORKS PLATINUM

BIBLE READER KJV BIBLE READER NEW INT VER

EDUCATIONAL

LINKWORD EACH

FISTS OF FURY II

HARD DRIVIN II

39

P.H.A.S.A.R V4

EXCELLENCE

239

ARE RE ORDER Mark Jedrafs. SATISFACTION GUARANTEED!

PRICE MATCH Any software advertised in this magazine WE WILL MATCH!!! (Except Specials)

Free gift voucher with every order

Send now for our all new low price catalogues!

AMIGA

Doctor Ami...

Doctor Ami.. is a memory and hard drive diagnostic program that performs sophisticated, low level tests on your Amiga system. It uses a full intuition interface with simple, clear controls and displays.

The program scans the system for all memory - including on board; expansion and accelerator memory. Tests regions and displays error list of bad memory locations and generates an error file.

Allows user to patch any file on the hard drive using the bad sector. Sectors with errors are removed from the black availibility map so that they will not be accessed. Can also be used to format damaged floppies; examine any mounted drive device etc etc. A MUST for all Amiga owners.

NOW ONLY \$49

Listed below is a sampling of our great range of products at excellent prices. We currently have over 1000 Amiga products (growing daily) and a great range of 64/128 products (over 400) to cater for your every requirement. We also stock a large range of utilities and books, and we guarantee all our products. Drop us a line, or phone or fax us for our free catalogues which include latest games and educational programs!

64/128

and the same of th	
UTILITIES	
1750 RAM EXPANDER 1541/1571 DRIVE ALIGNMENT 1581 TOOLKIT V2 ASSEMBLER/MONITOR/64 BASIC 8 TOOLKIT BASIC COMPILER 128 BASIC COMPILER 64 BIG BLUE READER 64/128 V3.1 COBOL 128 COBOL 64 SUPER 81 UTILITIES MAVERICK COPIER V5 DIGITALKER 128	399 44 60 60 48 29 90 80 65 55 58 68 35 50 39
SUPER SNAPSHOT 5 W/C128 DIS SUPER SNAPSHOT V5 SYSRES ENHANCED	110 93 25
O I O I I I I I I I I I I I I I I I I I	20

BOOKS

500 C128 Q & ANSWERS SUPERBASE - THE BOOK 64/128 TWIN CITIES 128 COMPENDIUM 1

ACCESSORIES

APROSPAN 4 slot cartridge holder FREEZE MACHINE SUPER GRAPHIX INTERFACE JNR. 89 VIDEO RAM 64K CART. FULL CREATIVITY

ANIMATION STATION HOLIDAYS & SEASONS HOME DESIGNER 128 49 HOME DESIGNER/Circuit Symbol Lib. 19 NEWSMAKER 128 43 SPECTRUM 128 I PAINT

GEOS

BECKER BASIC FOR GEOS 64 GEOS 64 VERSION 2 GEOS/PROGRAMMER 64 / 128 39 **GEOCALC 128** 49 FONTPAK INTERNATIONAL 39 GEOCHART 64/128 39 **GEOFILE 128** GEOFILE 64 39 GEOPUBLISH 64/128 GEOS 128 V2 WORD PUBLISHER 64/128

GENERAL PRODUCTIVITY

POCKET FILER 2 POCKET PLANNER 2 POCKET SUPERPACK 2 POCKET WRITER 3 (64 OR 128) SECURITY ANALYST 128 39 59 SUPERBASE 128 - V3 SUPERRASE 64 SUPERBASE/Sprscrpt/Bk 128 Pak) SUPERBASE/Sprscrpt/Bk 64 Pak) SUPERSCRIPT 128
SUPERSCRIPT 64
TECHNICAL ANALYSIS System 128
TECHNICAL ANALYSIS SYSTEM 64
BANK STREET WRITER 85 55 89 DATA MANAGER 40 DATA MANAGER
SWIFT CALC 64
WRITE STUFF 64
WRITE STUFF 64 W/TALK
WRITE STUFF 64 C128 VERSION
CMS ACCOUNTING 64 OR 128

ENTERTAINMENT: CALL FOR PRICES ALL TOP TITLES AT ROCK BOTTOM PRICES

STOCK **CLEARANCE SPECIALS**

HURRY!!!

THESE ITEMS ONLY AVAILABLE UNTIL CURRENT STOCKS LAST

AMIGA DIGIVIEW GOLD V 4

PROFESSIONAL PAGE

PEN PAL	175
PAGE STREAM V 2.1	349
WORD PERFECT V 4.1	319
DATA RETRIEVE (not prof)	85
TIGER CUB	99
DR T MODEL A MIDI	95
C64/128	
BASIC COMPILER 128	79
CMS ACCOUNTING	199
SUPER C 128	75
SUPER PASCAL 128	75
TEENAGE MUTANT TURTL	ES
64/128	35

MAVIS BEACON TYPING SPELL-A-FARI WHERE IS CARMEN SD EACH YOUR FAMILY TREE V3

ENTERTAINMENT BACK TO THE FUTURE 3 CAR VUP DEATH KNIGHTS OF KRYNN EXTERMINATOR FEUDAL LORDS

AMIGA

BOOKS		HORROR ZOMBIES	
AMIGA C ADVANCED FROG AMIGA DOS INS & OUT AMIGA GRAPHICS INS & OUT AMIGA MACHINE LANGUAGE AMIGA PRINTERS INS & OUT AMIGA SYSTEM PROG GUIDE BEST OF AMIGA TIPS/TRICKS KIDS & THE AMIGA PROG GDE TO AMIGA (SYBEX)	45 40 45 40 55 45 45 45 30 45	LES SUIT LARRY TRIPLEPAK MONDAY NIGHT FOOTBALL MU.D.S. NARCO POLICE NAVY S.E.A.L.S. PANZER KICK BOXING PENTHOUSE JIGSAW (R RATED) PRO TENNIS TOUR II QUEST FOR GLORY II	
GENERAL BUSINESS		RAILROAD TYCOON THE POWER	
CITY DESK V2.0	149	WAR LORDS	4

369 249 59

109

175

115 589 185

65 85 43

65

59 65 85

65 56

69

65

CREATIVITY/GRAPHICS

OHISAUMI DAINA	11100
3D PROFESSIONAL	349
COMIC SETTER	89
DIGI PAINT 3	115
DRAW 4D	329
PRINTMASTER PLUS	55
TURBO SILVER	169
	or land to the land

UTILITIES/LANGUAGES

64 EMULATOR 2 A500/2000	99
64 EMULATOR 2 A1000	99
AMI KIT	58
AMI ALIGN SYSTEM	49
AREXX	65
AZTEC C DEV PAK V5	375
ASSEMORO	143
BBC EMULATOR	109
DOS 2 DOS	69
POWER WINDOWS 2.5	115
PROJECT D V2	75
VIRUS PROTECT TOOLBOX	69
COLUMB AUTORO	

SOUND/MOSIC	
BARS AND PIPES	239
DR T MIDI REC STUDIO	89
DR T COPY APPRENTICE	139
DYNAMIC DRUMS	105
SONIX	79

All in stock items shipped the same day. Please allow 14 working days for delivery of out of stock items. Should your product be faulty please return disk only & copy of receipt for immediate free replacement. COD also available. Prices are subject to change without notice.

BUSINESS FORM SHOP

C128 TIPS & TRICKS BK

NAME	PH ()	BK/CARD/MASTERCARD/VISA NO: EXPIRY DATE
CITYSTA DESCRIPTION	TE	Cheques payable to Briwall Australia SIGNATURE:COMPUTER TYPE::
For complete list of products & prices,	please tick AMIGA () C64/128 ()	SUB-TOTAL \$



photograph and display a very realistic a block of text the OCR software checks rendering of it on the screen. The best a straight black and white scanner can do is display a crude, "dotty" image of a continuous tone picture.

Character Reading

The Cameron scanner can snaffle up and decipher text as well as graphics. Optical Character Recognition (OCR) is the ability to turn a piece of scanned text into an ASCII text file. Right now the best OCR packages have about 95% accuracy which might sound flash but means there will be 50 bodgy characters in a thousand word text scan - that could add up to 50 misspellings. Scanned text needs a thorough washing through a good spelling checker.

There are two types of OCR software in use today. The first and most intelligent form is feature extraction where the software checks the attributes of the scanned characters against a list of attributes each character is known to have. A "p" would be listed as a vertical line with a closed semi circle in the upper right hand sector. This method allows flexibility in dealing with different fonts and font styles on the fly. OCR software using feature extraction are often called "omnifont" packages.

The second character recognition method is matrix matching or font recognition where the software is taught the characters for specific fonts along with the cor- translations. Machine language programresponding ASCII values. After scanning in mers will probably love it.

each character with its list of stored characters. When it finds a match the ASCII character is pumped into an output text

The Cameron scanner comes with a matrix matching package called *Handy* Reader and has a ready installed font library which includes Helvetica, TimesRoman, Courier, LetterGothic, Pica, Prestige, Digits (numeric font), Typeface (for daisywheel text) and Bookface which is a mix of Times and Helvetica. New fonts can be "taught" in to the system by scanning in text and then building a new database by telling the software which ASCII character equates to which bit image.

Documentation

Documentation for the Handy Scanner comes in the form of two ring bound manuals, one for the OCR software and one for Handy Painter. The documentation is dreadful. Instead of employing someone who speaks English as their first lan-guage, Cameron appear to have handed the German originals over to a inebriated first year English student from the local Beer Keller. For example: "After a small run increasingly queries will be put whether the outlined character is a "..."?" Yeah, sure. The heavy, twisted grammar isn't even funny like many Japanese/English

As hardware, I found the Handy Scanner an excellent piece of kit with its wide scan head, switchable resolution, grey scale ability and robust design. The supplied software and documentation need improvement.



POPULAR MODULE EXCHANGE SERVICE

PARCOM Pty Ltd

Whites Hill Shopping Village

Samuel St Camp Hill, Qld 4152 (07) 395 2211

GAINRUN Pty Ltd

7/27 Justin St Smithfield NSW 2164 (02) 757 1055

Send your PCB, PSU, Drive or Mouse for next day replacement.

Reconditioned Modules available for most models

C64, 64C, 1541 II PCB \$99.00 A500 PCB \$129.00 AMIGA DRIVE \$200.00 MOUSE \$50.00 A500 PSU

ALL ITEMS MUST BE COMPLETE AND IN SERVICEABLE CONDITION

THREE MONTHS WARRANTY ON ALL MODULES PLEASE CALL FOR FURTHER DETAILS

AMIGA PUBLIC DOMAIN SOFTWARE

 Free delivery ● 1,000's of programs All orders despatched next day

One of the most comprehensive ranges of Amiga PD software. # FISH DISKS *** AMICUS DISKS *** AMIGAN DISKS *** ALPHA DISKS * T-BAG DISKS * TOPIK DISKS** All \$4.00 each

Best of Public Domain

LATENIGHTER DISKS

\$5.00 each

Over 450 of the very best from only \$2.95 per disk.

comprising **PUBLIC DOMAIN** CATALOGUE 1,000S of program listings SAMPLE DISK 10 great games/programs HINTS AND TIPS DISK 1.5 Megabytes of hints & tips **TUTORIAL DISK** Amiga Tutor and DOS Helper **GAMES DISK** 7 fantastic games **UTILITY DISK** 5 incredible utilities

Total Value \$36

Introductory Price\$19.95

INTRODUCTORY PACK

For only \$5 we will send our Catalogue Disk with a free game and virus checker PLUS a sample disk of 10 great Games/Programs. OR try our INTRODUCTORY PACK for only \$19.95. PLEASE TICK.

LEEJAN ENTERPRISES PO Box 66 Happy Valley SA 5159 Tel (08) 322 3392

BANKCARD/MAS	TERCARD/CHEQUE/MONEY ORDER
BCARD/MCARD NO	EXP
NAME	SIGNATURE
ADDRESS	
	PCODE

ISLAND SOFTWARE CLUB PRICE WARPS!

Yes, everything has been Price Warped in one Quantum leap...read on!

A DISK FULL OF GREAT AMIGA OR C64/128 SOFTWARE AT THE WARPED PRICE OF AND THERE'S 1000's MORE!

SAVE \$46!

And you can get them by joining the Island Software Club public domain library for only \$4! Yes that's right, Full Club Membership for just \$4 and that includes full Membership to the Island Bulletin Board System as well! If you're already a Member, then pay for next years now and save! You'd have to be warped to buy great public domain software anywhere else at these prices! Disks include all of the Amiga FISH series and more! C64/128 users are also heavily supported. So note this: All p.d. disks regardless of disk size now just \$1.00 each when you supply the blank disk, and only \$2.00 each when we supply the blank disk. So don't wait, it's not going to get any better than this!

PUBLIC DOMAIN PRICE-WARPED SPECIAL OFFER!

FIVE OF THE LATEST DISK RELEASES, ALL NEW SOFTWARE FOR AMIGA ONLY... \$5.00 FIVE DISKS PACKED WITH ALL NEW C-64 SOFTWARE FROM THE U.S.A. ONLY... \$5.00

* OTHER PRICE-WARPED AMIGA SPECIALS

CITIES I ILLOW WITHIN DE PARTICI	i di licitalid	
KCS IBM XT ON A CARD FOR A500.	Full IBM compatibility with HD support!	\$549.00
SYNCRO EXPRESS II FOR AMIGA.	The ultimate disk backup device!	\$110.95
AMIGA ACTION REPLAY II.	The old favourite at a new low price!	\$169.00
AMIGA ZYDEC REPLACEMENT MOUS	SE. A hi-res, hi-reliability replacement	\$48.00
MAESTRO 2400ZXR AMIGA MODEM.	Covers all speeds to 2400 inc. 1200/75	\$359.00
MAESTRO 2400XR AMIGA MODEM.	All speeds to 2400 except 1200/75.	\$285.00
GPTERM V4.5 COMMS S/W AMIGA.	The one recommended by Discovery!	\$ 86.50
		1,00,00

* OTHER DRICE WADDED CCA/100 CDECTALC

OTHER I RICE-WARFED C04/128 SF	ECIALS	
C64 FREEZE MACHINE CARTRIDGE.	Tape and Disk backup device now only	\$52.95
C64 POWER CARTRIDGE.	Powerful Disk & Tape toolkit with reset.	\$ 47.95
C64 SOUND & GRAPHICS BOOK.	By Greg Perry. As serialized in ACAR!	\$ 8.50
GRAPHICS & SOUND SUPPORT DISK.	All the programs in the book on disk!	\$ 2.00
APROTEK 300/1200 MODEM C64.	A 1200 baud modem for the C64 at only	\$135.00
GPTERM COMMS S/W FOR C64/128.	The 'does everything'package for C64.	\$ 59.50
C64 RAMDRIVE, MEMORY EXPANDER.	Real memory power, RAM based disk drive!	CALL
C64 RAM-LINK.	Overcomes C64/128 RAM expansion probs.	CALL
* Due to ite equilibrity along all and to 0 1 1 1		OALL

^{*} Due to its popularity, please allow up to 2 weeks delivery on some hardware items. PD software orders are always sent within 24 hours.

SO CALL ME NOW ON: (03) 741 9981 IF YOU'D PREFER TO FAX ME THEN THE NUMBER IS: (03) 741 5681. OR CALL THE ISLAND BULLETIN BOARD WITH YOUR MODEM, ON: (03) 742 3993. MAYBE CONTACTING ME ON DISCOVERY 40 IS YOUR STYLE . . . *66697# BETTER STILL, WHY NOT FILL IN AND SEND THE FORM BELOW FOR A QUICK POSTAL RESPONSE!

ISLAND SOFTWARE CLUB ORDER FORM FREEPOST 49 Island by Mail PO Box 381 Werribee Vic 3030

Name Address City Postcode Phone () Computer type: Amiga [] C-64 [] Yes I would like Membership to the Island Software Club PD Library and all its associated benefits for just \$4.00. Please Tick [] I am already a Member of the Island Software Club, but I'd like to take advantage of the savings and pay my next years Membership now. [] I'm a sceptic, send me some extra info on the item/s I have circled above FREE: []

Overseas orders must be drawn in Australian Funds. Cheques & Money Orders should be made payable to ISLAND BY MAIL.

Please send me the following warped	priced items!
1	\$
3	\$\$
4 ALADA TALIBA SEBURICADA LINA AL	\$
5 the resolution and strates while the	\$
CLUB MEMBERSHIP \$4 *	\$
FLAT RATE POSTAGE	\$ 6.00
TOTAL FOR THIS ORDER	\$
* \$4 memberships only available on th Payment type: Bankcard [] Masterc Diners [] Cheque []	ard[] Visa[] Amex[]
Card No:	
Card Expiry Date:// Toda	y's Date://
Card Holders Signature:	

Well Eunice, you know how it is, all they want to do is



Are your kids turning into game playing techno-feebies? How can you introduce some healthy software into their daily diet of binary bytes? Anne Glover expounds on the methods she recommends in such dire circumstances

s the computer was purchased to enhance the educational opportunities of the children, you probably had some grand visions that do not appear to be materialising. Perhaps you imagined Kate at the keyboard producing assignments the teacher could actually read, Julia introducing you to the world of telecomputing and Peter setting up databases of his favourite reptiles.

The reality instead is that computer activities are limited to devious and devilish acts of death and destruction. Or perhaps Peter has taken on the persona of "Larry", Kate has turned into Carmen Sandi-WHO-go and Julia needs to save a complete colony of lemmings before breakfast!

As a result you are a bit concerned about the direction computer activities have taken in your household. A teacher may suggest you take a look at the following areas if you are worried.

· Is the child spending an "inap-

propriate" amount of time with the computer?

 Are family relationships, schoolwork, friendships, behaviour, social activities, sporting activities or personality suffering because of this activity?

tivity?
Children and of course adults need a balanced diet, both in their consumption of food and of intellectual stimuli. This doesn't mean they need to spend exactly equal amounts of time reading as they do socialising or writing essays. They do however need variety, a range of activities to be involved in, just as they do with food. Most children will naturally select a range of inputs and provide for themselves a healthy lifestyle, even if they do need an almighty push with the homework.

Computer game junkies

An occasional child will spend too much of their time, and become too involved in the world of computer games. Just as another child will spend too much time glued to the TV or another will try to live on nothing but junk food. All of these children (or adults) need some careful redirection

If your children are not in this category you may still be concerned that they are "wasting" a lot of time playing games. Throughout history many parents have had the same concern, maybe not with computer games but with all the other games kids enjoy. Remember that games are often the way children learn, about their body, their mind and the world around them.

My toddler's latest game is to turn things "ot" and "on", taps and sprinklers, power points and lights and even the fuse box has had a turn. He might be learning a lot but I hope the lesson will be completed before winter time, I am already sick of being drenched. My four year old is into collecting rocks, large and small, dirty or clean, sometimes with its own wildlife attached. This is also not a lot of fun for Mum, especially when you stub your toe on them when creeping into their room at night or the toddler takes a liking to a larger one (twice the size of a brick) and he drops it on your other toe. I must grit my teeth and remember that this is how children learn, and perhaps how mothers do too.

If games are an effective way for children to learn, what are they learning from computer games?

To begin with you will need to examine the type of games your child is into but generally they can be a great introduction to computing. The kids may already be more computer literate than you are. They will be able (when they are ready) to move into more serious computing without the mental blocks that may inhibit the oldies.

Benefits

While playing the "dreaded" games the child may have developed a number of skills. These skills will vary with the age of the child and the type of games but could include: enhanced logical patterns of thought, understanding of sequences, development of memory, use of symbols, responding to actions, development of imagination and fantasy, enhanced language skills, understanding of maps, scales and directions, reading, spelling, counting, improved reflexes, keyboard and mouse familiarity, listening, concentration and comprehension skills.

Some of these skills may not translate themselves from the world of computer games, others however will help them at work and at play.

Children with special problems such as an attention deficit disorder or dyslexia could gain enormously from a carefully selected game that meets their specific needs. Here a true "game" could be a valuable educational tool.

What to do

If your Amiga is still relatively new, the obsession with games could be an early fad as they become used to the machine. Games are very attractive to big and little kids and it is understandable that they attract a lot

Continued on p24



JOIN THE Australian

Amiga User

Association

AmiOz BBS(02) 627 4442 24hr

The Australian Amiga User Association Inc. is one of the largest user groups in Australia, it was formed over 4 years ago to help the User get the most out of the Amiga Advanced system. Members receive help with the working of the Amiga Operating System, from setting up the Amiga, to application programs and the Amiga outstanding graphic capabilities, the members get the best help we can give through our professional Amiga Australia magazine and our Amiga only Bulletin Board AmiOz BBS. Lots of our members make there own hardware and pass them on to other members at very little cost. We have members using application programs on graphics, animation, multimedia, music and desktop publishing.

Membership includes

Amiga Australia magazine

Public Domain Software Library is one of the biggest in Australia and one of the cheapest, with over 600 disks, The A.A.U.A. has a large Amiga Computer Show each year for all to see the Amiga The AmiForum Amiga Computer Show" members get involved helping to put on the show each year.

Our AmiOz BBS Bulletin Board is all Amiga, and runs the most unique software system in the world, SkyLine, and uses the SkyPix graphic protocol that let you used your mouse as well as the keyboard,

The A.A.U.A. has open days in the Sydney area each Month for their members to see the latest in Software and Hardware, Workshops on area of the Amiga, the CLI AmigaDOS, WorkBench, Graphics, Music, animation, desktop publishing and business programs.

Australian Amiga User association Inc. Membership Application Form

	Send cheque or money order made out to A.A.U.A.
Name:	or use your credit card
Address:	I authorise The Australian Amiga User Association Inc. to debit my□ Bankcard □ Mastercard account for the amount of \$35.00 My card number is
Suburb Post Code:	
Ph. No:	Signature: Expiry Date:
Age:Occupation:	I understand I should receve my Australian Amiga Use
The Australian Amiga User Association Inc. P.O. Box 389 Penrith 2750 N.S.W Australia	Association Inc. Membership package within 4 weeks Signature: Date:

INTERLINK

"THE MAIL

Bringing you the best for your AMIGA

ARCADE GAMES

AIR COMBAT USA	67.90	LOTUS ESPIRIT TURBO	66.90
ARACNAPHOBIA	66.90	MIGHT BOMBJACK	66,90
AWESOME (w/T-Shirt)	76.90	N.A.R.C (Ocean's Newie)	66.90
BACK TC FUTURE II	56.90	NIGHT HUNTER	56.90
BAR GAMES	56.90	NITRO (Multi-Player)	56.90
BATTLESTORM	76.90	PANG	66.90
BILLY THE KID	CALL	PRINCE OF PERSIA	56.50
BOULDER DASH CONS.	16.95	RICK DANGEROUS 2	56.90
CARVUP (Cute)	56.90	ROBOCOP II	69.90
CRIME WAVE	66.90	SHAD/BEAST II w/T-Shirt	76.90
DRAGON'S LAIR II	86.90	SILKWORM IV	66.90
E-SWAT	56.90	SIMULCRA	46.90
FLIMBO'S QUEST	56.90	STRIDER II	56.90
GREMLINS 2	56.90	SUPER CARS II	CALL
HARD DRIVIN II (Linkable)	56.90	SUPER MONACO GP	66.90
JAMES POND (For Kid's)	56.90	SUPER OFF ROAD	56,50
JUPITER MASTER DRIVE	56.90	TEENAGE MUT. TURTLE	66.90
LAST NINJA REMIX	66.90	TURRICAN II (Excellent!)	56.90
LEMMINGS (Great Fun)	66.90	VIZ (R-RATED)	56.90
LINE OF FIRE	56.90	WRATH OF THE DEMON	66.90

STRATEGY GAMES

BATTLE COMMAND	66.90	NOBUNAGA'S AMBITION II	86.90
BETRAYAL	76.90	PANZER BATTLES	46.90
BLITZKREIG MAY 1940	56.90	PORTS OF CALL	66.90
BATTLE ARMINNES	56.90	POWERMONGER	47.90
CENTURIAN-DEF ROME	62.90	POWERMONGER US CIVIL	CALL
DAS BOOT (Sub-Sim)	66.90	POWERMONGER WWI	CALL
DEBUT (Planetary Sim)	56.90	RAILROAD TYCOON	86.90
DEUTOROS	CALL	RORKES DRIFT	56.90
FIRE BRIGADE (Classic!)	46.90	SECOND FRONT	56.90
GENGHIS KHAN	76.90	SHERMAN M4	56.90
GUNBOAT (New)	66.90	SILENT SERVICE II	CALL
HALLS OF MONTEZUMA	CALL	SIM CITY GRAPHICS DATA	56.90
HARPOON	66.90	SIM EARTH	CALL
HARPOON DATA 2	49.50	SUPREMACY	66.90
HUNTER	CALL	TOWER FRA	57.90
M1 TANK PLATOON	76.90	UMS II	76.90
MIDWINTER	76.90	WALL STREET WIZARD	56.90
MIDWINTER II (Better?)	76,90	WAR GAME CONSISET	46.90
MOONBASE	CALL	WHITE DEATH	56.90
NAM	76.90		
(1000)000			

SPORTS GAMES

4D SPORTS BOXING	CALL	KICKOFFII-FINALWHISTLE	33.90
4D SPORTS DRIVING	CALL	M.U.D.S	66.90
AMIGA CRICKET	46.90	PARIS-DAKAR RALLY	56.90
BRIDGE SIMULATOR	66.90	PGA WORLD TOUR GOLF	66.90
CELICA GT-4 RALLY	56.90	PRO TENNIS 2 (HD able)	66.90
CRICKET CAPTAIN	CALL	SKI OR DIE	56.90
INDIANAPOLIS 500	46.90	TEAM SUZIKI	66.90
INT'L WRESTLING	46.90	TOURNAMENT GOLF	56.90
J. NICKLAUS UNLIMITED	76.90	TOURNAMENT SOCCER	56.90
KICK OFF II	56.90	ULTIMATE RIDE	66.90

ADVENTURE GAMES

BARD'S TALE III	CALL	DUCK TALES	56.90
B.A.T	66.90	ELVIRA	76.90
BUCK ROGER'S	56.90	EYE OF BEHOLDER	CALL
CADAVER	56.90	HERO'S QUEST	66.90
CAPTIVE	56.90	IMMORTAL	46.90
CAPTIVE MISSION	CALL	KNIGHTS OF LEGEND	CALL
CHAOS STRIKES BACK	66.90	LEGEND OF FAERGHAIL	56.90
CODENAME ICEMAN	66.90	MEAN STREETS	66.90
COLONEL'S BEQUEST	66.90	OBITUS	76.90
CORPORATION	56.90	SEARCH FOR THE KING	66.90
CORPORATION MISSION	46.90	SECRET MONKEY ISLAND	66.90
CONQUESTS CAMELOT	66.90	SECRET SILVER BLADE	CALL
DEATH KNIGHTS KRYNN	CALL	WIZARDRY-BANE FORGE	82.90
DRAGON WARS	76.90		

FLIGHT SIMS

BLUE MAX	66.90
F15 STRIKE EAGLE II	CALL
F19 STEALTH FIGHTER	76.90
F29 RETALIATOR II	CALL
FALCON	56.90
FALCON MISSION DISK 2	46.90
FLIGHT OF INTRUDER	CALL
HAWK	CALL
MEGA FORTRESS (B-52)	66.90
MIG-29	66.90
SECRET W. LUFTWAFFE	CALL

FREECALL 008 ORDER LINE

9am-5pm Mon-Fri (Credit Card Orders Only Please)

008 020 633

(For all queries about prices and availability please use our Customer Service Line)

Please note that prices and availability are subject to change without notice. Any software product without a price (i.e. with "CALL") has not been released as at 1/4/91.

COMPILATIONS

(PLEASE CALL FOR MORE DETAILS ABOUT THESE PACKAGES)

BLOCKBUSTER SSI	56.90
CINEMAWARE COMP II	56.90
DATAFLOW PACK	99.50
EDITION ONE	56,90
FISTS OF FURY	66.90
GOLD FEVER	46.90
OCEAN ACTION PACK	56.90
SOCCER MANIA	66 90

DO YOU WANT IT FASTER ?!!

OVERNIGHT! \$10 per Parcel

Call for details

BUSINESS

CYGNUS ED PRO	129.00	PEN PAL	178.00	
DATA RETRIEVE	96.90	PERS'L FINANCE MANG.	68.90	
DATA RET. PROFESS'L	185.00	PHASAR V4.0	95.00	
DESKTOP BUDGET	95.00	PRO PAGE V2.0	449.00	
EASY LEDGERS	379.00	PROWRITE V3.1	179.00	
EXCELLENCE V2.0	289.00	SCRIBBLE PLATINUM	87.90	
FREELANCE	48.90	SUPERBASE	76.90	
HOME ACCOUNTS	85.00	SUPERBASE 2	125.00	
HOME FRONT	125.00	SUPERBASE PRO 4	CALL	
PAGESETTER II	169.00	SYSTEM 3	129.00	
PAGESTREAM V2.1	369.00	SYSTEM 3E	155.00	
PAGESTR, FONTS (ea)	54.50	WORKS PLATINUM	189.00	
PAGESTREAM FORMS	49.50	YOUR FAMILY TREE v2	119.00	

GRAPHICS

And the second s	-			
3D PROFESSIONAL	495.00	FLOOR PLAN CONST.	78.50	
3D TEXT ANIMATOR	74.50	IMAGINE	479.00	
AEGIS GRAPH, ST'R	89.00	INTROCAD PLUS	175.00	
ANIMATION STUDIO	245.00	MODELLER 3D	115.00	
ART DEPARTMENT	129.00	PAGE FLIPPER +FX	179.00	
ART DEPARTMENT PRO	339.00	PIX MATE	79.50	
CREDIT TEXT SCROLL	56.90	PRINTMASTER PLUS	56.90	
DELUXE PAINT III	98.90	PROFESSIONAL DRAW 2	259.00	
DELUXE PHTOLAB	98.90	PROMOTION	115.00	
DELUXE PRINT II	98.90	SCENE GENERATOR	74.50	
DELUXE VIDEO III	98.90	SPECTRA COLOUR	115.00	
DESIGN 3-D	139.00	TITLE PAGE	179.00	
DIGI-MATE 3	59.50	TURBO SILVER 3D	175.00	
DIGI-PAINT 3	119.00	TV TEXT PROF.	189.00	
DIGI-WORKS 3D	185.00	ULTRA DESIGN	439.00	
DIRECTOR II	185.00	VISTA	145.00	
DIRECTOR TOOLKIT	59.00	VISTA PRO (Needs 3MB)	189.00	
ELAN PERFORMER 2	189.00	X-CAD DESIGNER	229.00	

UTILITIES

AMAX II (software only)	349.00	FAT TRACKS (Copier)	89.50
AMI ALIGNM'T KIT	69.50	GFA BASIC	145.00
AMIGA VISION	189.00	GP TERM	99.00
AMOS	119.00	HI-SOFT BASIC	179.00
AMOS COMPILER	CALL	HI-SOFT EXTENSION	59.50
AReXX	74.00	KCS POWER BOARD	679.00
ATONCE (PC EMUL)	CALL	KDV VIRUS KILLER	24.95
AZTEC C PROF.	395.00	NO VIRUS	49.50
BENCHMARK MODULA-2	279.00	PELICAN PRESS	145.00
CAN DO	195.00	PIXEL SCRIPT	169.00
CAN DO PRO PACK	64.50	QUARTERBACK v4.0	84.50
CROSS DOS V4.0	59.50	QUARTERBACK TOOLS	99.00
DEVPACK 2.0	149.00	SAS/LATTICE C V5.1	455.00
DIRECTORY OPUS II	57.90	SAS/LATTICE C++	559.00
DISK LABELER	59.50	STARSOFT HD BACK	69.50
DISK MECHANIC	119.00	SUPERBACK	109.00
DOCTOR AMI	59.50	SYNCRO EXPRESS III	139.00
DOS LAB	39.50	VIDEO TOOLS ON TAP	119.00
DUNLAP UTILITIES	99.50	XCOPY + Hardware	139.00

MUSIC

279.00	DR T'S TIGER CUR	119.00
429.00		119.00
129.00		539.00
389.00		189.00
98.90		179.00
149.00		96.50
449.00	SOUND EXPRESS	127.50
	429.00 129.00 389.00 98.90 149.00	429.00 MASTER SOUND 129.00 MASTER TRACKS PRO 389.00 MUSIC X JUNIOR 98.90 PERFECT SOUND 149.00 QUARTET

The Ultimate AMIGA Source

ORDER LEADERS"



EDUCATION

We carry a large range of education software. Please call for more information on our

ı	BIBLE READER	129.00
ı	CARMEN SAN DIEGO (ea)	76.90
ı	CROSSWORD CONS. SET	58.50
ı	DESIGNASAURUS	58.90
ı	DISTANT SUNS	78.90
ı	FUN SCHOOL 2 (ea)	48.90
ı	FUN SCHOOL 3 (ea)	57.90
ı	JUNIOR TYPIST	57.90
ı	KATIE'S FARM	58.90
ł	KID'S COLLECTION	58.90
ı	LEARN TO READ WITH	44.50
ı	MATH MASTER (AUSSIE)	38.90
ı	MCGEE	58.90
ı	PRIMARY MATHS	48.90
١	PUZZLEBOOK 2	48.90
ı	TALKING STORYBOOK (ea)	49.50
ı		

HARD DRIVES

ARE YOU LOOKING FOR A HARD DRIVE THAT WILL OFFER YOU

RELIABILITY, AND COMPATIBILITY

THEN LOOK NO FURTHER THAN THE GVP RANGE OF QUALITY AMIGA HARDWARE PRODUCTS. THEY'RE THE ONES WE USE AT INTERLINK SO WE HIGHLY RECOMMEND THEM.

CALL FOR PRICING

BEST SELLERS

BEST SELLING GAMES

- 1. *RAILROAD TYCOON (Due April)
- 2. *PGA TOUR GOLF (Due April)
- 3. *SIM EARTH (Due June)
- 4. UMS II
- 5. BLUE MAX
- 6. *BARD'S TALE III (Due April)
- 7. AMIGA CRICKET

This chart is based on sales and advanced sales over the last month. '*' Not released as at 1/4/91.

AMIGALINK

AmigaLINK Disk Magazine

Now available, the *all new* AmigaLINK Disk Magazine, with over 1 Meg of useful information crammed on a disk.

Packedl full of reviews (with screen shots!), articles and general snippets of interest. Plus our latest full pricelist.

Only \$3.00

(if ordered on it's own, please add \$2.00 for postage)

ACCESSORIES

DISKS

3.5" DSD	D
MEMOREX	19.90
PREMIUM	13.00
UNBRANDED	10.00

DISK BOYES

DION D	UNLU
3.5" 80	19.00
3.5" 120	22.00
BANX 80	25.00
5.25" 100	18.00
5.25" 140	25.00

BOOKS

We have heaps of titles for the AMIGA including the complete ABACUS range.

PRINTER RIBBONS

We carry all popular dot matrix printer ribbons.

We are Australia's leading Amiga Mail Order specialist so if you can't see what you want, just call us.

C64/128

We apologize to our C64/128 customers but we have decided to no longer sell the C64/128 range of software and hardware products. Thanks for your support in the past.

IIIBIMI IPC

We have one of the largest ranges of games and educational software products for your computer. Check out our free catalogue today.

SEGA

We now have the full Sega range in both hardware and software. Get your *free* catalogue now.

All prices and availability are subject to change without notice. Some items listed may not have arrived by press time.

Postage & Handling

SOFTWARE Please add \$3.00 per order.

HARDWARE AND BOOKS
Please call for freight charges.

OVERNIGHT
We offer a \$10 Overnight service (Express Courier) Call for details

FREECALL ORDER LINE 008 020 633

Credit Card Orders Only - No Enquiries 9am-5pm Mon-Fri

CUSTOMER SERVICE LINE (06) 293-2233 All Enquiries, Prices and Availability

24 HOUR ORDERING LINE (06) 293-2233 (Answering Machine After Hours)



FAX (06) 293-1438



Fill out the order form (or write on any piece of paper) and send to P.O. Box 1155 Tuggeranong ACT 2901

HOURS 9am - 5pm Mon - Fri

Unit 2, 216 Cowlishaw Street **Tuggeranong Town Centre**

N.B. Personal shoppers please note that prices may vary in our shop

Your Software Warehouse!

Product Name	Computer	Price	Qty
[Disease and \$0.00 ments are not as the		-1	11 1
Please add \$3.00 postage per soft You can also ask for 'overnight' de		ire please ca	all.
Name			
Address			
Add1000	Daytime)	
Cheque ☐ Money Order ☐ V	Phone No	 Mastero	ard
Full Card No			
Expiry Date			
Signature			

Education

of attention, especially initially. It may just be the first stage, later they may be more interested in exploring the other capabilities of this technology. So be aware that your computer's usage will probably change over time and don't be overly concerned about an imbalance in the early months.

I can remember when our Amiga was new, a friend and collegue reassured me that my "big kid's" obsession with computer games was just a fad. Her boys still play games from time to time but now use their computer for a wider range of uses. To this date I cannot say my 36 year old "kid" has such a balanced approach to computer usage.

Just as most parents monitor the types of TV programs, the videos that their children watch as well as the friends their children associate with, so they will monitor the types of software their children have access to.

If your children are spending a lot of time with the computer, then the selection of software is most important. With young children you probably have a high degree of control, as you will be selecting all of their software for purchase. As the kids get older you will need to prevent any pirated software from entering your home, not such an easy task. From a moral point of view as well as an educational point of view it is worthwhile insisting on this basic ground rule.

Much of the software currently available for the Amiga does not fit neatly into the education or the entertainment categories, programs can easily straddle both areas. After all education can indeed be fun! Some of these programs are really worth purchasing and may overcome your dilemma of too high a concentration on games. If the educational programs are fun, the kids are more likely to spend a lot of time on them.

Examples of these "edu-tainment" programs include the *Carmen Sandiego* series, *Sim City* and *Ports of Call*. If the kids are spending a lot of time with the computer, you may feel more comfortable if the games have an educational emphasis.

Another approach is to play the games with your children. You never know, you could learn a lot, both about computers and about your child, and have some fun along the way. Family relationships could improve in other areas as a result. The whole family could end up spending an "appropriate" amount of time playing games.

SHAPES

by Anne Glover

How would your child like to get into a toy factory and start designing their own toys? Just imagine some of the incredible ideas in your child's head leaping to life in this factory. Perhaps a mini spaceship to take them out of this world (and maybe back again) or a little teddy that cleans up their room as it talks and plays around, or perhaps a magic wand to make their little sister or brother disappear. Wild imaginations will lead to some fanciful toys!

First Shapes, from First Byte, USA, allows your child to enter the secret domain of the toy factory. Although it will not extend as far as your child's seemingly limitless imagination, it will provide a lot of fun and serve an educational purpose at the same time.

The Toy Factory allows the child to play around with five basic shapes (circle, square, triangle, rectangle and oval) as they learn to become familiar with them. The child uses the shapes to make up their choice of 10 different toys in a multitude of ways. For example a clown's head could be any of the five shapes, as can his body and legs, each making him different from the last clown and the next

next project. This is a fun way to introduce these shapes to a young child.

Another activity on the First Shapes program is simply called "Shapes", this is an even simpler introduction to

the five shapes. This game shows and names a shape, then allows the child to ask for it to be made larger or smaller. So the concept of size is also being introduced.

After the child is fairly familiar with these five shapes they are ready to enjoy the "Toy Fair". Here they are required to help teddy knock the bottles down (or ring the bell etc.) by selecting the right shapes. The program may ask the child to select "the triangle", or "the smallest shape" to

help teddy.

To reinforce their knowledge of the five shapes a game of concentration is included. Three levels of difficulty with a choice of playing by themselves, with a friend or with teddy give this matching game plenty of scope.

Conclusion

This program introduces five basic shapes to young children. The concept of size is also addressed. As far as it goes it is a great program. I don't see it spanning the age group suggest on the package (ie 3-8 years) but rather the 3-5 year age group. An older child having some difficulty with these concepts would also benefit while having some fun at the



Letters

by Anne Glover

Here is another excellent program from First Byte. Like many First Byte products it is a quality talking program and can be custom designed (to a degree) to suit your child. First Letters and Words is ideal for the 4-7 year olds.

This program attempts to help children:

 Identify the upper and lower case letters of the alphabet.

• Locate the alphabet keys on the computer keyboard.

• Associate letters with words that use those letters in the initial position.

Achieve sight recognition of a 76 plus word vocabulary.

• See how each letter would be drawn with pencil and paper.

Take a written and spoken description and associate

it with a familiar animal or object...

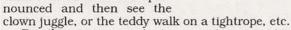
If all of that sounds a bit drab and boring it is only the objectives of the program. The way these objectives are achieved is through having lots of fun as you will see below.

The Magic Letter Machine carefully and slowly draws any letter the child selects from the keyboard. After "thinking" for a few seconds, the Magic Machine then produces a picture of something that begins with the chosen letter. So if the child selects "k" on the keyboard, the machine slowly and correctly draws a "k" then produces a picture of a kangaroo or a kite or a king. Different pictures appear if the same letter is selected a number of times. While this is happening the computer is talking to the child, saying "the letter k" and "k is for kangaroo" etc.

With the help of this program the child will become familiar with the letters of the alphabet, words that begin with these letters, as well as how to pronounce and write

the letters - a truly "Magic Machine".

Identifying upper and lower case letters is a problem for some children. The problem may even be accentuated in these "computer toddlers" who are so familiar with the upper case keyboard. The "Card Circus" game requires the child to match upper and lower case letters to start the circus rolling. If an incorrect selection is made, that letter disappears, giving the child a better chance next time. This talking program allows the child to hear the letters pronounced and then see the



For the more competent a guessing game is also included ("Who Am I"). The computer shows and reads a short paragraph that gives a clue to the animal or object in question. At the easy level the answer is also produced, the child only needs to copy it in using the keyboard. At the medium level three words are presented to be selected from (a sort of kiddies' multiple choice). At the hard level

\$100 OFF!

Audio Engineer^{Plus}

The Top Quality Stereo Sound Recording and Editing System for the Amiga.

That's right! For a limited time only, you can trade in any old Amiga sound sampler direct to GSOFT and purchase the highly acclaimed Audio Engineer Plus for only \$329.00+P/H. That's an incredible "\$100 OFF" our normal retail price!

Take advantage of this FANTASTIC trade-in offer NOW!

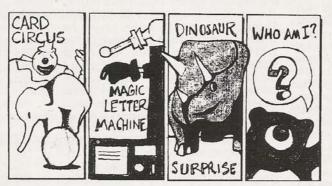
Just send your old sound sampler and payment of \$329 + \$10.00 postage and handling to:

GSOFT PTY LTD. 24 Commodore Pde. Smithfield West. South Australia. 5114. Phone/FAX 08 254 2261

Address							
City							
ost Code			Phone				
endorse n	ny cheque	e/money	order for	\$339,00	OR plea	se debit	my
BankCard	Visa Ca	ırd Mas	terCard	Expiry I	Date		
		-					

only the number of letters are indicated. When the child types in a word all the correct letters are accepted, in whatever order. Any incorrect letters are ignored. Once the word is complete, it is spoken, spelled and a picture of the mystery object appears.

This program has a few American pronunciations and spellings, the colours are a bit drab and it probably doesn't adequately span the 3-8 year age group indicated. Apart from those shortcomings, which I think are minor, it is an excellent program. As an added bonus *Dinosaur Surprise* is included, a screen-based colouring book to add a bit of variety.



Conclusion

A fun introduction to letters and words, one well worth buying for the 4-7 year olds.

Distributed by: Dataflow 02 331 3153 RRP: \$54.95

Education

Mixed Mother Const

by Anne Glover

And now for something completely different. Remember the Sierra organisation and Roberta Williams? She designed the Kings Quest series amongst others. Roberta has now put her hand to a children's adventure with Mixed-up Mother Goose and it is a beauty!

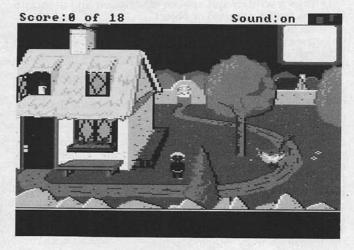
After matching up Little Bo Peep with her sheep, for example, the completed nursery rhyme is played by a grateful little character. When the whole game has been completed the rhymes will be jumbled again, randomly, so each game represents a new challenge.

Children do not need to be able to read to take part in this adventure.

their preferred method of movement, or perhaps you could encourage them to change the method of movement from time to time.

Fortunately each game can be saved for an additional session on another day, so you won't have the five year olds up burning the midnight oil. Up to 12 different games can be saved which may be useful for teach-





Your child will be able to wander through nursery-rhyme land and meet many of their favourite characters. The player has a very important role in this adventure. As you will see, the nursery rhymes have been jumbled up leaving many distraught little people. Little Bo Peep for example has lost her sheep but has in her possession somebody's tuffet. Mary Mary (quite contrary) may have a pie but would much prefer a watering can for her silver bells and cockleshells.

The child's role is to locate the correct objects or animals for their nursery rhyme friends. Initially this may appear to be a fairly simple task, but as the land is quite large (44 screens) with 18 different rhymes to unjumble, your child will be involved for quite some time. To help them become immersed more fully into the role, several images are presented for the child to select their own representation.

the nursery rhyme characters talk to the child in words and in pictures. Humpty Dumpty tells the player he needs a ladder, then a picture of the required object appears making it easier for the child to identify it and locate it later. Only one object can be carried at a time so the child needs to trade objects as they move around this wonderful fantasy land.

this wonderful fantasy land.

Mixed Up Mother Goose is designed for children of four years and older. Many three year olds who are into nursery rhymes will enjoy this program with your assistance. Once a young child becomes familiar with Mixed Up Mother Goose they will probably take over, as only a few keys are needed to play the game. Characters can however be moved around using the mouse or the joystick instead of the keyboard if they wish. No doubt your child will find

ers as well. This program will be well loved by all those little kids and big kids that enjoy nursery rhymes. It has bought our old favourites into the 1990s with a bang. Not strictly an educational program but one that amply spans the education / entertainment spheres.

Certainly worth a look for something a little bit different.

> Ozisoft 02 313 6444 RRP: \$49.95





In this month's column we'll be looking at data compression for file transfers and Telecom's Discovery. Before we kick off, I would like to say a big thanks to all those people who wrote to me or called my BBS with positive comments about this column. The editor has decided to keep it going!

File compaction

Regular modem users are often found compressing and decompressing files. But what is the point of doing this? Well, it saves money and time.

First of all, several files can be sent in one hit by joining them together as one big file. As the files are joined, the compression program packs the information using special algorithms to remove repeated sequences of data and replace them with codes which can be expanded back to the original data later on. The resulting file is much smaller, meaning it will take less time to transfer the file.

Some people refer to this process as archiving. Whilst this is partially correct, the term archiving refers purely to the fact that compacted files are often stored away as an archive of no longer required files. The correct term is compression.

How do we compress files? There

are many programs available which all have different compressing speeds and sizes. A few popular programs

-		*****			
Dis	kMasl	1er	· · · · · · · · · · · · · · · · · · ·	Varp	
LhA	rc		7	ip.	
LhV	Varp		7	.00	
Arc				ak	

Compressing whole disks

This is done in several ways. To archive a disk you need a program that can create the directories when unarchiving. In the beginning Warp (.WRP) was used. Warp was slowly replaced with LhWarp (.LHW). Then people just used LhArc (.LZH) which is mainly used for programs (some LhArc unarchivers do not create directories, so be careful). The latest utility to handle this job is DiskMasher (.DMS).

I used DiskMasher and LhWarp on the same disk and outputted the file onto a hard drive.

DiskMasher (DMS) was quite difficult to work out, but was still understandable when you knew how. DMS also allows encrypting, meaning that to uncrunch, a password has to be entered. Several compression methods are available (I used the default compression rate). It also allows a text file to be enclosed. While crunching, DMS shows you the size uncrunched and the size it is crunching it to. At the end of the crunching session it tells you the size of the output file, number of tracks it compressed, time taken and the rate (ie tracks per minute). DMS also took advantage of colours to make it more understand-

LhWarp usage was more like the usual compressors and made it very clear how to use it and like DMS also allowed a text file to be enclosed. LhWarp while crunching uses the disk bit map to skip empty parts of the disk. LhWarp was VERY slow compared to DiskMasher as shown below. At the end of crunching it tells you the input and output sizes.(see table below).

Although LhWarp was able to achieve a smaller output size, I think that a different mode of compression on DMS could have produced a better result, but taken a bit longer.

Overall, DMS was better. Disk-Masher can be found on the majority of BBS's and if not ask someone on a multiline BBS or ask your SysOp to get it for you by file requests. As a last resort you could even try my BBS or by mail and I will get it to you as soon as possible.

Discovery!

New services are being added all the time to Telecom's Discovery. The available services now include:

AAP News Report National & International Databases Online Banking FlightComm Information

IntelNet Electronic White and Yellow

Mediatel Electronic Messaging Aust. Bureau of Statistics Fax Transmission Dow Jones News Retrieval Service Metex Weather reports Official Airlines Guide Money Watch Shopping Racing news and Betting

How useful are all these wonderful

The Electronic White and Yellow pages allows you access to 55 telephone directories and over seven million names. The Online Banking service is available 24 hours a day with the Commonwealth Bank, you can obtain Mastercard / Bankcard / Keycard account information and details of the last 150 transactions can be viewed. Australian Bureau of Statistics offers 148 different topic headings and information 24 hours a day plus other Government databases.

Charges vary from 5 cents per page to 20 cents a minute depending on the time you call, plus a registration fee of \$60.00 (which includes software for IBM's and compatibles) plus an additional \$15.00 monthly

Continued on p32

DiskMasher LhWarp

Version 1.02 2.01

Author J. Forbes

Output Size SDS Software 671280 bytes 641224 bytes

Crunch Time 10.29 mins 19.23 mins

Uncrunch Time 1:05 mins 6:29 mins





STOP PRESS! 1802 Colour Monitor

Suits C64, Amiga Starter Pack, VCR, Nintendo and Megadrive. (Cables may be required)

Computer Spot MAIL ORDER

TOLL FREE (008) 252 130 FOR ORDERS ONLY PHONE (02) 638 2897

PRICE DEVASTATION

AMIGA 2000

Latest Version 1.3



Bonus 8 FREE Games



Save Hurry!

(Monitor not included)

AMIGA 2000

Includes 40 Mb Hard Disk

Save \$**200**



Bonus 8 FREE Games

(Monitor not included)

MEGA PACK over \$200 AMIGA 500



Includes Amiga 500 · Mouse 2 Joysticks plus \$180 worth of software (see below)

BONUS 8 FREE games

AMIGA 500 SOL

Amiga 500 Phillips Monitor \$489 Star NX1000CL Printer Cable Kindwords 512k Ram Expansion \$240 of software - see below \$240

\$399 \$39 BONUS \$99 8 FREE \$139 games.

> Save over \$300



Remote Control **Joysticks**

Micro Switched

Trade in your Amiga 500 Today! for \$ 1

(Assuming complete V1.3 in working order + boxes)

Avtek Modem

300/300 suits Amiga or PC



68030

25 Mhz Board \$**1399**

> inc 2 Megs suit A2000 only

Roctec Genlock

TOTAL

Suits ALL Amigas Includes test software

Colour **Printers**

\$2204



Star NX100CL

9 pin colour \$200 worth of software (see below for titles)



Citizen 200 GX 9 pin colour \$499

worth of software (see below for titles)



Citizen GSX 140 24 pin colour \$700 Extra \$240 worth of software (see below for titles)

* For special software offer select from: Airbourne Ranger, Pictionary, Creature, Pipe mania, Drakken, Microprose Soccer, Kindwords and more.

AMIGA

"No Fuss" Software Exchange Policy If it doesn't work when you get home,

we'll replace it!





PC SOFTWARE & HARDWARE

ART & UTILITIES

DELUXE VIDEO III DIGIVIEW GOLD 4 DISTANT SUNS FANTAVISION SCULPT ANIMATE 4D VISTA PROMOTION AMIGA VISION AMIGA VISIO AMOS AREXX ARG ASM B.A.D. CROSS DOS DEVPA DISK MASTER LATTICE C COMPILER 5.1
PRO VIDEO POST MEGA DOS

QUARTERBACK 4.0

Requires 1meg chip 2meg fast BEST If you own an Amiga OWN THIS! 399.00 99.95 99.95 99.95 Posters and banners supports colour Design & run video productions Design & run video productions 3D designing package Voted, best digitizer, new dynamic res Astronomy Software excellence Animate your art Ultimate 3d render/animation system Ultimate 3d render/animation system Fractal landscape generator system Build movement scripts for videoscape loon based software authoring system Games / demos creator language Programing language Fastest assembly language compiler Speed disk access Access msdos files on amiga drives Programmers assembly language. 149.95 129.95 129.95 Programmers assembly language 189.95 High quality file utility Convert ibm/amiga files Comm's with viatel 69.95 79.95 Video titling with anti aliased fonts 399.00 Disk based game copier Parameters Amiga dos tutorial Vol. 2 thru to 20 available Hard drive back up tool

CHAMPIONS OF KRYNN CORPERATION Corperation Mission Disk CODENAME ICEMAN COLONELS BEQUEST CONQUEST OF CAMELOT DRAGON FORCE DUNGEON MASTER Dungeon Master Data Disk 1 S QUEST 4 LEGEND OF FAERGHAIL LEISURE SUIT LARRY 3 MEAN STREETS MIDWINTER MIGHT & MAGIC 2 NOBUNGAS AMBITION NARCO POLICE POOL OF RADIANCE POLICE QUEST 2

Role playing epic Sc Fi role playing continue the adventure 49.95 Sierra secret agent adventure classic 59.95
New release sierra adventure 59.95
A highly recommended sierra adventure 59.95
So-fi role playing combat team 59.95
3D excellent role playing
Chaos strikes back, requires above 59.95
The classic romes to the amina 59.95 The classic comes to the amiga Adventure game epic Adventure game epic
3D role playing epic
Sierra hit adult adventure
Sci-Fi detective adventure
Epic 3d arcade adventure
Known as the best role playing epic Cludeo type mystery detective game 59.95 VERY HEAVY QUALITY ADVENTURE 79.95 Great new arcade game
D & D role playing game
More crime bustin adventures!
Crazy new futuristic game
Arcade movie tie-in Outer space sierra

TRANSWRITE WORD PERFECT WORKS PLATINUM DESKTOP BUDGET HOME ACCOUNTS PAGESETTER II

Quality word processing system The ultimate word processor Improved WP/ SpSh/ Dbe Home finance controller Balance visa/bcard and the gas bill Beginners dtp package

99.95 499.00 229.95 89.95

EDUCATIONAL Sprechen sie deutch Great fun for the kids

Educational junior high 5th Educational fun

BEGINING GERMAN DUCK TALES
DECIMAL DUNGEON
DISCOVERY MATHS
DISCOVERY SPELLING
DINOSAUR DISCOVERY KIT
FUNSCHOOL 8-UP
FUNSCHOOL 2-5 (3)
FUNSCHOOL 5-7 (3)
KID TALK
INTELLITYPE
1 OGO AMICA **DUCK TALES**

Educational fun Learning prehistoric world Educational collection Educational collection FUNSCHOOL 5-7 (3)
KID TALK
INTELLITYPE
LOGO AMIGA
MATH BLASTER PLUS
MATH TALK
Mavis Beacon Teaches Typing
MICRO FRENCH 1 & 2
PRIMARY MATHS
READ 8 RHYME
READ 8 RHYME
READ A RAMA
SIM CITY
SPELLER BEE

Educational collection
Quality sentance learning
Learn to touch type on computer
Educational programming skills
Great learning fun for all
Quality maths learning 5 to 10yr
#1 Typing tutor al ages
Learn French
Education Series
Educational for 10 yr olds
Reading program
Design and maintain model city
Learning words Educational collection Learning words Quality training package SPEED READ

WHERE IN EUROPE CARMEN Geography adventure
WHERE IN USA CARMEN
WHERE IN WORLD CARMEN
WHERE IN TIME CARMEN
WHERE IN TIME CARMEN
WORLD ATLAS

Latest release in the series
Unique computerized world atlas

59.95 69.95 39.95 139.95 69.95 69.95 89.95 49.95 99.95 84.95

84.95 84.95 84.95 89.95

349.00 99.95 299.00 149.95 149.95

299.00

299.00 149.00 499.00 699.00

699.00 399.00

MUSIC

Bars & Pipes
Deluxe Music Construction Set
Music X Sonix Harmoni 24

Professional midi sequencer Composition editor Quality midi & editing tool Music editor track MIDI sequencer

HARDWARE

40 Mb SCSI H/Drive Quantum 8UP Memory Board 2Mb Ram A2010 Internal Drive Accelerator GVP A3001 4MB ACION HEPIAY MK2 ADRAM 540 0K INSTALLED Amiga A590 20MB Hard Drive COMIDI AMIGA COMPUTER AMIGA 500 AMIGA 500 STARTER PACK DELUXE KIT AMIGA 500 AMIGA 2000 PRO

AMIGA 2000HD (40MBHD) AMIGA 2000HD PRO AMIGA 3000 354 AMIGA 2000HD PHO
AMIGA 3002 25MHZ
Golden Image Optical Mouse
KCS Power Board A500
Monitor CBM 1084S
Roctec Amiga Mouse
PC Emulator Bridge Board AT
Philips Monitor (CM8833)
STAR NX 1000C
CITIZEN GX 200
CITIZEN I 4nd GX CITIZEN 140 GX PSON LQ 400

CBM MPS 1230
RAM CHIPS A590/ADRAM
Roctec Genlock
RF302C AMIGA DISK DRIVE
Trumpcard Professional A2000
SCANNER 4" hand held
Scanner Golden Image
Districture PAI V4 0 Digiview PAL V4.0 Vidi Amiga Modem Avtek 124

Voice-coil, auto-park, 11-18ms A2000 ram exp board 749.00 699.00 199.00 A2000 internal drive Azuvu internal orive 199.00
8030,4Mg 32 bit ram,82co-pro,28mbz2695.00
New version for A500 and A2000 249.00
Expandable to 4 meg for the a500
Sults amiga 500 2meg ram options 699.00
Quality amiga midi 179.95
Budget midi interface 109.95
Eventful brong committer 700.00 699.00 179.95 109.95 799.00 Powerful home computer nc tv modulator & software 1 Meg a500 + heaps of software Latest model, we love it! 1099.00 With extra \$1000 in software
40 Meg drive factory fitted!
With 40 Meg drive and software 1769 00 2495.00 with 40 Meg drive and software. The stuff that dreams are made of Extremely reliable Amiga mouse blue menulator for your a500 amiga Stereo, suits amiga atari c64 & PC The best amiga mousel! Inc. 5:25° 1.2 meg drive Stereo, 2 yrs warranty! Colour 9 pin. Feature packed . Colour 9 pin. Great performance Colour 29 pin. Great performance 5695.00 139.95 799.00 449.00 49.95 799.00 Colour 24 pin. Feature packed Black 24 pin. Superb print 599.00

Unbelieveable value, IT'S HOT
Slim external drive on/off switch
Top speed performance scsl interface
Cameron type 10 suits A500 only
400 DPI suits all Amigas Best quality still digitizer Frame grabber pal with vidichrome

Auto everything quality high speed

E & ADVENTURE

new arcade hit 3 disks ! New release Great new arcade hit Sci-Fi adventure Arcade game of the movie 3D car racing overhead view Pola device camps

Sol car racing overhead view Role playing game5 Classic so-fi hero fun SC-FI Role PLaying hit game arcade adventure Sc-fi role playing action game Stratesy from psyconosis

Strategy from psygnosis

Strategy from psygnosis

Defender crown /King Chicago/SDI

D&D epic adventure series

Mercenary 3 fantastic game 3D

Golden Classic

ARCADI	
AWESOME HOTTEST	
ANARCHY	
ATOMIC ROBO KID B.A.T	
BACK TO THE FUTURE 2	
BADLANDS	
BATTLE MASTER BUCK ROGERS	
B.S.S.JANE SEYMOUR	
CADAVER 3D	
CAPTIVE	
CARTHAGE CINEMAWARE BUNDLE	
CURSE AZURE BONDS DAMOCLES	
DAMOCLES	
DOUBLE DRAGON 2 Dragons Lair Time Warp 2	
ELVIRA	
FIRE & FORGET 2	
GHOSTS & GOBLINS	
GOLDEN AXE GREMLINS 2	
HEROES QUEST	
IMMORTAL	
JUDGE DREDD	
JAMES POND KILLING GAME SHOW	
LEMMINGS	
LOTUS TURBO ESPIRIT	
NUCLEAR WAR NIGHT BREED	
MIG-29	
MAGIC FLY	
MIDNIGHT RESISTANCE	
MONTY PYTHON NARC	
NITRO	
NINJA WARRIORS	
ORBITUS	
PANZA KICK BOXING	
PROFESSOR MARIARTI	
RICK DANGEROUS 2	
ROBOCOP 2	
SHADOW OF BEAST 2 SHADOW WARRIOR	
SHOCK WAVE	
SPY WHO LOVED ME	
STUN RUNNER 3D	
STREET ROD STRIDER 2	
Teenage Mutant Ninja Turt	1

New version
Hot adventure game fun with
3D Car racing shoot em up
The arcade classic is fantastic! 89.95 79.95 59.95 49.95 Arcade smash hit 59.95 59.95 59.95 59.95 59.95 69.95 **69.95** Hit game based on the movie Hit game based on the movie Sierra adventure fun 3D Arcade action from comic classic Detective fish arcade fun Hot new shoot em up strategy You'd be crazy to miss this! You'd be crazy to miss this!
2 player dual screen racing fun
Play the part of the maddest people
Excellent 3D adventure
Soviet flight simulator
3D Space action strategy game
Arcade action game
Arcade Flying circus madcap fun
Great arcade conversion
Hot pew car caring fun 69.95 49.95 59.95 69.95 49.95 59.95 **69.95** Hot new car racing fun Superb quality arcade hit 59.95 New graphic advent from psygnosis 69.95 Top quality arcade fun Arcade smash em up go robo Show off your amiga today! Kung fu action arcade Sc-Fi action 007 arcade action game fast paced action Buy it, build it up, n' race it! Seguel to great arcade game 69.95 79.95 59.95 49.95 59.95 69.95 49.95 Sequel to great arcade game Ask your kids! Ask your kids!
Great arcade shoot up!
New Release
New 69.95 59.95 69.95 59.95 59.95 59.95 49.95 79.95 TURRICAN TURRICAN TORVAK WARRIOR ULTIMATE RIDE U N SQUADRON VENUS FLY TRAP WHEELS OF FIRE WRATH of the DEMON 89.95 49.95 59.95 69.95 69.95 69.95 Wonder Boy In Monster Land BATTLE COMMAND CAPTIVE CELICA GT4 CHASE HQ 2

59.95 69.95

69.95

49.95 59.95

49.95 49.95

Advanced Destroyer Simulator
ACTION STATIONS BLUE MAX BATTLE OF BRITAIN DAS BOOT
F16 COMBAT PILOT
F29 RETALIATOR
FIGHTER BOMBER
F19 STEALTH FIGHTER HUNT FOR RED OCTOBER INDIANAPOLIS 500 GENGHIS KHAN Bandit King Of Ancient China BATTLE CHESS BLITZKRIEG CHESSMASTER 2000 HARPOON HARPOON BATTLESET 2 HOYLES GAMES 2 M1 TANK PLATOON OVER RUN OPERATION HARRIER POWER MONGER SECOND FRONT SECOND PHONT SIMULCRA STORM ACROSS EUROPE SUPREMACY TEAM SUZUKI TEAM YANKEE TRUMP CASTLE **ULTIMA 5** UMS 2 WOLFPACK WHITE DEATH

3D war strategy action Naval strategy WWII naval strategy 69.95 59.95 69.95 54.95 59.95 49.95 W.W.1. flight simulator Their finest hour! Ineir finest hour!
W.W.W.1. submarine simulation
The fighting simulator
3D combat simulator
Voted best game! combat simulator
Absolutely amazing! Absolutely amazing!
Submarine strategic warfare
3D Car racing Game Of The Year 90'
Ancient orient strategy
Deep and involved strategy
Famous animated chess game
Battle of ardennes
Beet qualifix 3d chases guer 99.95 49.95 59.95 49.95 Best quality 3d chess ever Submanne simulation wartime
North Atlantic convoy
More great card games
Very heavy sc-fi galactic power
Quality 3D tank simulation
Military war game
Aircraft war strategy
Awesome 3D global control game
War name Awesome 3D global control of War game 3D sc-fi strategy game War gaming strategy SC-FI EPIC Role Playing 3D motorcycle racing action Excellent 3d tank simulation Cambling compilation Gambling compilation Heavy d&d strategy 49.95 79.95 Follow-up to strategy great Submarine simulation Strategy on the russian front

SPORTS

SIMULATORS & STRATEGY

AMIGA CRICKET PRO TENNIS
TV SPORTS FOOTBALL
TV SPORTS BASKETBALL
KICK OFF 2
HARDALL Jack Nicolas Course Design TOURNAMENT GOLF
WINNERS ITALY 1990
World Championship Soco
WORLDCUP 90 SOCCER
ULTIMATE GOLF

Excellent game needs 1 meg
Best tennis game seen
Enjoy gridiron ?? get this
Best sports hit game
Still the best soccer game
Baseball skills are lested here! 49.95 Fantastic 3D golf and course maker 79.95 Arcade style golf game Soccer fans go for it! New soccer game More soccer fun Golfing great

BUSINESS & HOME

ADVANTAGE DAY BY DAY
DG CALC
EASY LEDGERS
ELECTRIC THESAURUS **EXCELLENCE 2.0** GOLD DISK OFFICE KIND WORDS MAILSHOT PLUS MAXIPLAN PLUS MAILSHOT PLUS
MAXIPLAN PLUS
PAGE STREAM 2.1
PAGE STREAM FONTS
PROFESSIONAL PAGE 1.3
PROWRITE 3.0
SCRIBBLE PLATINUM
SUPERBASE PERSONEL 2
SUPERBASE PROFESSIONAL Fully programable database
SYSTEM 3. E

Mailing label processing package
Top spreadsheet
Ouality desktop publishing
Additional lonts
Ouality of package
Wordpro with colour & graphics
High speed quality word processor
Excellent Dbase package
Excellent business pack, call.
New executive version of above

Powerful high speed spreadsheet Home planner package Quality spreadsheet Accounts payable & receivable On-Line multi-tasking excellent 299.00 299.00 Professional wordprocessor Complete Dbase/Sp.sh/WP/graphics Word processing package + dictionary Mailing label processing package Top spreadsheet 69.95 199.00 199.00 399.00 59.95 299.00 219.00 129.95 139.95 299.00 129.95 159.95





There's a Spot near you!



PC SOFTWARE & HARDWARE • C64 SOFTWARE & HARDWARE

PC SOFTWARE & HARDWARE

ART, GRAPHICS, UTILITIES, **BUSINESS & HOME**

Ninja Turtles Colour Book MAILSHOT PLUS SUPERCOMM Veek Cholesterol Cure DATA MANAGER DG CALC FIRST CHOICE PUBLISH IT 1.2 PUBLISH IT LITE PROFESSIONAL PLAN SWIFTCALC SYSTEM 3 WORD WRITER

BANNERMANIA
DELUXE PAINT ANIMATION. Animation for your pcl
DELUXE PAINT 2 ENHANCED Best graphic editor colour printing
GREMLINS PRINT KIT 2
LABELS UNLIMITED
NEWSROOM
PRINT POWER
PRINT POWER
PRINT SHOP
STATE SHOP
SIGNATURE AND ANIMATION. Animation for your pcl
Pun printing package for kids
Cualify Label printing package
Home desk top publishing
Print cards & banners
Print cards banners
Excellent menu designers package 29.95 Great fun for the kids 49.95 Walling database system
Quality communications package
Book and software Quality package
Accounting package
Simple quality database
Pc spreadsheet 109.95 119.95 89.95 Quality 3 in 1 business package 249.95 Quality desk top publishing Budget dip package Superb quality spreadsheet Quality spreadsheet 349.95 Quality business pack, call Quality word processor

ARCADE & ADVENTURE

ALTERED BEAST **BATTLE TECH 2** BANDIT KINGS BUCK ROGERS DOUBLE DRAGON 2 ELVIRA INDIANAPOLIS 500 It Came From The Desert FOUNTAIN OF DREAMS **GENGHIS KHAN** JONES IN THE FAST LANE LAST NINJA 2 PUNISHER STREET ROD Teenage Mutant Ninja Turtles TEST DRIVE 3 CHAMPIONS OF KRYNN CODENAME ICEMAN COLONELS BEQUEST CONQUESTOR CAMELOT KINGS QUEST 5
KINGS QUEST TRIPLE PACK
LARRY TRIPLE PACK LEGEND OF FAERGHAIL NIGHT BREED NASCAR CHALLENGE OBLINGAS AMBITION NOBUNGAS AMBITION2 OPERATION STEALTH

59.95 Sc-Fi 3D action game Arcade game of the movie Cresent hawks revenge 69.95 Cresent naws revenge Role playing adventure Fantastic adventure fun Hot arcade smash em up I Adventure game horror fun Best 3d car racing seen! 99.95 69.95 59.95 89.95 Excellent cinemaware horror movie 59.95 antasy adventure Famasy adventure
Excellent oriental strategy game
Yuppie Adventure Sierral Hit
3D ninja fighting classic
Hot new release
Buy it, build it up, 'race it!
Suck on the pizza dudes!
VGA 256 colour car driving game
Relivs the draye of the money 89.95 59.95 89.95 54.95 69.95 Relive the days of the romans Role playing hit Sierra secret agent adventure Sierra medieval quest VGA adventure spectacular Fairs sierra adventure in VG 59.95 54.95 69.95 69.95 Epic sierra adventure in VGA 99.95 1,2,3 Of the series 84.95 Leisure suit larry 1,2 and 3 NEW ADVENTURE QUEST 89.95 69.95 LEGEND OF FAEHGHAIL
MECH WARRIOR
It's back IS-cF riole playing epic
MEGATRAVELLER
MONTY PYTHON
MICROPROSE COMPILATION Gunship / Silentservice / Airbourne
MIGHT & MAGIC 2
Voted no. 1 adventure role playing Voted no. 1 adventure role playing Excellent horror adventure US NASCAR racing Deep asian historic adventure epic 89.95 **99.95** 59.95 Great sequel strategy
Secret agent adventure hit Sierra Hit new adventure 79.95 VGA 256 cult adventure game Futuristic adventure Futuristic adventure
More d&d role playing
Elvis mystery adventure
Space Quest / Larry / Police Quest
Fantastic Arcade game supports VGA
Deep SC-Fl adventure strategy game Hot new car racing fun Horror adventure Arcade smash hit Epic role playing hit 256 colour space simulator 79.95 89.95

SPORTS

3D POOL ck Nicklaus Golf Designer ITALY 1990 INTERNATIONAL SOCCER HARDBALL 2 LINX GOLF LAKERS VS CELTICS TV SPORTS BASKETBALL TV SPORTS FOOTBALL PGA TOUR GOLF

QUEST FOR GLORY 2

SECRET SILVER BLADES

SEARCH FOR THE KING SERRA STARTER PACK STELLAR 7 STAR CONTROL SUPER OFF ROAD TRANSYLVANIA 3 THEXDER 2 FIREHAWKS

WING COMMANDER

RANX

,	OITIO	
	3 dimensional pool game	69.9
	Golf simulator fantastic	69.9
	Soccer mania	59.9
	Wow more soccer madness excellent!	
	Great baseball hit game	59.9
	VGA 256 the best golf	69.9
	Basketball at the top!	54.9
	Best selling sports hit!	79.9
	Best selling sports hit!	59.9
	Hanging in there sells well	59.9
	Fantastic golf fun!	59.9
	Classic quality 3D golf	59.9

STRATEGY & SIMULATIONS

BLITZKRIEG BLUE MAX FIGHTER BOMBER FLIGHT OF INTRUDER KNIGHTS OF THE SKY A10 TANK KILLER COVERT ACTION CURSE OF AZURE BONDS DAS BOOT DAS BOOT HOYLES GAMES 2 JET FIGHTER LIFE DEATH 2 M1 TANK PLATOON NOBUNAGAS AMBITION MID WINTER MIG-29 PANZER BATTLES TEAM YANKEE TEST DRIVE 3 THEIR FINEST HOUR WHITE DEATH WOLFPACK

WWII naval simulation Oriental chess 3d animated 69.95 Battle of Ardennes
WW2 Bi-plane heros
Air combat mission simulator
Complex fighter plane simulator 109.95 Voted #1 combat simulator Top quality fighter plane simulator 59.95 69.95 attles at s Microprose WWI simulation
The ultimate business simulation
Create your own planet 89.95 Tank attack aircraft simulator 69.95 War strategy war strategy
Role playing adventure
World war 2 submarine simulation
More excellent card games
High speed combat simulator
You're chance to be a brain surgeon
Was climited. 54.95 Deep strategy game ancient Japan 89.95 Deep strategy game ancient of all of the future Soviet flight simulator War game from SSI WWI flying simulation War time russian strategy Strategy boardgame 89.95 79.95 69.95 59.95 89.95 69.95 69.95 79.95 89.95 Russian fighter combat game 3D high quality combat game Excellent on VGA Excellent on VGA
Brilliant 3d air combat game
Strategy on russian front
WW2 sea combat submarine game

EDUCATIONAL

DUCK TALES FIRST WRITER FUNSCHOOL 2-6 FUNSCHOOL 6-8 FUNSCHOOL 8-UP MATH BLASTER PLUS Mavis Beacon Teaches Typing MICKEY ABC MICKEY SHAPES MICKEY MATHS
PLAYROOM
SIM CITY SPELL IT PLUS SPELL IT PLUS
WHEEL OF FORTUNE 2
Where In Europe Is Carmen
WHERE IN TIME CARMEN
WHERE IN USA CARMEN
WHERE IN WORLD CARMEN
WORLD ATLAS

Educational fun 49.95 Learning skills 49.95 Quality maths package 69.95 Typing tutor
Early educational
Early educational
Early educational 69.95 69.95 69.95 Early learning fun & games Design & control a city Quality education package Great family home game Geography game Teaches history & geography 79.95 69.95 39.95 84.95 84.95 Geography game Geography game Atlas on computer, fantastic 84.95 89.95

HARDWARE

ADLIB SOUND CARD PC 40 ser III VGA CGA MONITOR **EGA MONITOR**

The original sound card Twin 5.25" XT computer Single 5.25" 40 meg HD XT co 699.00 AT 286. 1 meg ram. 40 meg HD.inc 1995.00 4 colour PC monitor 16 colour HI-RES PC monitor + card 699.00 29.95 199.00 369.00 GENIUS PC MOUSE GM-6X
Microsoft compatible 3 button
GENIUS PC MOUSE GM-F302 As above inc Graphic Art soft
GENIUS PC MOUSE GM-F303 As above inc CAD software



C64 SOFTWARE & HARDWARE

ART & UTILITIES

AWARD WARF KWIK WRITE MINI OFFICE 2 NEWSBOOM PAPERCLIP PUBLISHER PAPERCLIP PUBLISHER
SWIFTCALC
TOP 20 SOFTWARE TOOLS
WORD WRITER 5
ACTION REPLAY MK6
FAST LOAD CARTRIDGE EXPERT CARTRIDGE TURBOLOAD FASTLOAD

Create & print own awards Signs, calenders, banners Print signs,cards,banners Quality database package 29.95 29.95 79.95 39.95 Budget word processor 29.95 44.95 Budget word processor
Wordprofdbase/syreadsheet/comms
Desk top publishing package
Desktop publishing
Fully featured spreadsheet
Great collection of classic utilities
Promising word processor
Hacker utility cartridge
Lieited stocks 39.95 54.95 39.95 39.95 69.95 134.95 Limited stocks 49.95 Utility cartridge Fastloader cartridge with reset 149.95 49.95

ARCADE & ADVENTURE

ATOMIC ROBOKID ATOMIC HOBORID

ATOMIC HOBORID

BUCK ROGERS

CASTLEVANIA

DAYS OF THUNDER

DOUBLE DRAGON 2

DRAGON NINJA E SWAT E SWAT GHOULS & GHOSTS GOLDEN AXE FLIMBOS QUEST KINGS BOUNTY NINJA REMIX SHADOW WARRIOR STAR WARS TRILOGY STAH WARS THILOGY STREET ROD TURRICAN WHEELS OF FIRE Wonder Boy In Monster Land BARDS TALE 1 2 & 3 CHAMPIONS OF KRYNN CHAMPIONS OF KHYNN
MONTY PYTHON
MIGHT & MAGIC 2
SECRET SILVER BLADES
STRIDER 2
SUPER OFF ROAD RACING Teenage Mutant Ninja Turtles TOTAL RECALL

39.95 39.95 39.95 39.95 49.95 39.95 Arcade smash hit Arcade smash nit
Great game of the movie
Comic book classic adventure
Arcade adventure
Tom Cruise car action
Arcade smash hit Kung fu action game 39.95 39.95 Arcade action hit game Arcade action nit game
Quality arcade conversion
Arcade smash hit
Arcade smash hit
Adventure quest
New release of Last ninja
Hit movie based arcade game
King fy hit basede 39.95 39.95 34.95 39.95 39.95 49.95 39.95 39.95 44.95 39.95 39.95 Rung fu hit arcade
All 3 star wars games
Buy it, build it up, n' race it!
The best shoot-em up available!
Top collection of racing car hits! 39.95 59.95 Arcade smash hit Role playing adventure Classic role playing epic voyage Role playing hit Arcade madness Excellent role playing game Great new role playing hit! Arcade smash hit 3D over bead racing Arcade smash hit 49.95 49.95 39.95 44.95 39.95 59.95 3D over head racing Finally it's here!!!!! Movie hit game NEWClassic role playing 39.95 39.95

SPORTS

ALL STAR TEST CRICKET ALL STAM TEST CHICKET BLADES OF STEEL JACK NICKLAUS GOLF INTERNATIONAL SOCCER JORDAN V BIRD ITALY 1990 TV SPORTS FOOTBALL WINNERS ITALY 1990 PRO TENNIS PRO TENNIS WORLD CUP 90 SOCCER LILTIMATE GOLD

ULTIMA 6

New cricket game 3D sports game Soccer at it's best Still the best tennis game Excellent sports fun New golf release

39.95

49.95

STRATEGY & SIMULATION

BATTLE CHESS CHESSMASTER 2100 CARRIERS AT WAR PANZER BATTLES VEGAS GAMBLER FERRARI FORMULA 1 F16 COMBAT PILOT IGHTER BOMBER

3D animated chess fun Latest chess game Back at last the deepest simulator 39.95 Back at last the deepest sit Strategic tank battles Classic space strategy Strategic wargame Ultimate role playing game Ultima 1,2 & 3 pack 39.95 34.95 59.95 Gambling hits 44.95 Quality racing game Combat flight simulator 39.95 49.95 49.95 39.95 39.95 49.95 49.95 39.95 39.95 Nice Air co Submarine simulator
Air-combat simulator
Submarine combat simulator Table soccer simulator War simulation

EDUCATION

FAMILY FEUD FUNSCHOOL FUNSCHOOL MATH BLASTER SIM CITY SPELL IT TYPE

SUBBUTEO U N SQUADRON

29.95 24.95 24.95 Family word game 2-6Early learning skills 6-8Educational fun 24.95 59.95 49.95 8-UPLearning is fun at home! a-Or-Learning is fun at nome Early learning game Best typing tutor Build, govern,your own city! Early learning skills Quality typing tutor

MAIL ORDER

TOLL FREE (008) 252 130 FOR ORDERS ONLY PHONE (02) 638 2897

After something special?

If it's not here, we can chase it for you.





C64 SOFTWARE & HARDWARE • GAMEBOY • SEGA

WHEEL OF FORTUNE Where In Europe Is Carman WHERE IN USA IS CARMEN WHERE IN WORLD CARMEN		29.95 69.95 69.95 69.95
HA	ARDWARE	13/19
1541 DISK DRIVE ACTION REPLAY MK6 C64 TEST PILOT PACK	For the commodore 64 Hacker utility cartridge C64 computer, disk drive, games	299.0 134.9 499.0

ACTION REPLAY MK6
C64 TEST PILOT PACK
C64 Computer, disk drive, games
CASLE RF C64
CABLE RF C64
CABLE SERIAL 1.5M C64
DATASETTET
DUSK MOTCHER
POWER SUPPLY C64
PRINTER MPS1230
PI, suit C64 serial + PC
299.0
Allows use of parallel printer on C64

GAMEBOY HARDWARE

GAMEBOY
ILLUMINATOR
PROTECTOR
AUTO POWER

Take your games anywhere 149.00
Pay in the dark 49.95
Case, holds gameboy + 7 games 39.95
Plug into car cigarette lighter 29.95

GAMEBOY SOFTWARE

CAMILD	JI OOI I WAILE	
ALLEYWAY BURAI FIGHTER CATRAP CASTLEVANIA CHESSMASTER CHASE HO DEAD HEAT SCRAMBLE FINAL FANTASY FIST OF MORTH STAR FLIPUL GOLF HARMONY MOTOCROSS MANIACS NEMESIS NFL FOOTBALL OPERATION C POWER RACER QUARTH QUIX SERPENT SKATE OR DIE	Blockout Space harrier type action Challenging arcade fun Arcade adventure Can you beat this? Arcade acventure Av4 Off road racing Adventure role play Martial arts Arcade puzzle Mario goes for par Brainteasing puzzle action Motocross action Motocross action Excellent arcade action Arcade puzzle Arcade cacing action Arcade puzzle Arcade classic Arcade classic Arcade tail Skateboard action	39.93 59.93 49.93 69.93 69.93 69.93 49.93
	Skateboard action All time favourite	

SEGA MEGADRIVE

HARDWARE

SEGA MEGA DRIVE
POWER BASE CONVERTER
MEGA DRIVE CONTROLLER
MEGA CONTROL STICK

Ultimate 16 bit arcade console
Use sega master system games
Extra standard controller unit
Arcade joystick

SOFTWARE

AFTER BURNER II
Alex Kiid The Enchanted Castle
Arcade smash hit
BATTLE SOUADRON
BURNING FORCE
BUDOKHAN
COLUMNS
CYBERBALL
DVNAMIC DUX
E-SWAT

Jet fighter action
Arcade smash hit
Space shoot em up
Sci-fi motobike actior
new release
futuristic sports hit
arcade action hit

Jet fighter action
Arcade smash hit
Space shoot em up
Space shoot new release futuristic sports hit arcade action hit game police shoot em up FORGOTTEN WORLDS GHOST BUSTERS GHOULS & GHOSTS GOLDEN AXE shoot em up who ya gonna call ? just like the arcade machine! best version ever seen! sports fun New release, Shoot em up Arcade action shoot em up GOLF
HERZOG ZWEI
LAST BATTLE
MYSTIC DEFENDER
PHELIOS Arcade action Axe em up Axe em up
Fantasy arcade adventure
Strategy simulation
role playing adventure
machine gun mania
3D arcade shoot the lot!
high speed bike racing WOW!
qualify snorth bit PHELIOS
POPULOUS
PHANTASY STAR II
RAMBO III
SPACE HARRIER II
SUPER HANG ON
SUPER LEAGUE BASEBALL
SUPER THUNDERBLADE
SWORD OF VERMILLION
SUPER MONACO GP
REVENGE OF SHINOBI
TWIN HAWK
THUNDERFORCE II
TRUXTON ngut speet bits racing quality sports hit helicopter arcade hit new releas car racing super fun! martial arts hit new release shoot em up new release 69.95 99 95 TRUXTON new release Soccer game fun classic arcade puzzle game World Cup Italia 90 Soccer ZOOM ZANY GOLF Classic golf put put



"There's a Spot near you"

BRISBANE

339.00 79.95 29.95 89.95

> 225 George Street Brisbane, QLD 4000 Phone (07) 229 8011

BURWOOD

185 Burwood Road Burwood, NSW 2134 Phone 744 8809

CHATSWOOD

Shop G9, The Gallery Endeavour Street Chatswood, 2067 Phone 419 2333

CITY

165 Castlereagh Street Sydney, NSW 2000 Phone 261 4344

HURSTVILLE

185E Forest Road Hurstville, NSW 2200 Phone 570 7333

LIVERPOOL

Shop 4, Westfield Shopping T'n Macquarie St. Liverpool, NSW 2170 Phone 601 7700

NEWCASTLE

80 Pacific Highway Charlestown, NSW 2290 Phone (049) 42 1522

PARRAMATTA

Shop 21a, Greenway Arc., 222 Church Street Parramatta, NSW 2150 Phone 891 1170

PENRITH

Shop 1, Carvan Arcadr 389 High Street Penrith, NSW 2750 Phone (047) 32 3377

MAIL ORDER FORM

Send to: Micro Computer Spot. Unit 3, Metro Centre. 38-46 South St. Rydalmere. NSW 2116

PRODUCT / PROGRAM NAME	COMPUTER	DISK TYPE	QUANTITY	PRICE
				Bra Lat
			SUB-TOTAL	
Tick here for your FREE regular issues of Ch	ip Chat mag	azine.	POSTAGE	
			TOTAL	
Delivery Details	Payment I	Details	MessterCord	//SA
Name	Cheque	Postal order		
Address		Master Card	Visa A	AGC _
	Credit card no.			
Telephone				
For software only, add \$3 for post or \$15 for courier. For hardware call to arrange. We will exercise all reasonable care in the processing of your orders but we accept no expossibility for orders, monies or products lost or delayed in transit. Your order will normally be	Valid from	to		
esponsibility for orders, monies or products lost or delayed in transit. Your order will normally be processed within 48 hours, but please allow 14 working days for the fulfilment of orders. Telephone products are, of course, welcome. Whenever possible, please supply a phone number where contact can be made within normal working hours. PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE.	Name on card .			
DO NOT SEND CASH. When paying by cheque please supply your home address and home telephone number together with normal working hours telephone number.	Signature			

MEMORY EXPANSION PRICES at April 15th

-		,	TAPPARA AC	UAA.
1MB x 1	l - 100ns	DIP	DIP	\$6.10
Antique and a series provide	- 80ns	DIP	DIP	\$7.30
4x256	- 100ns	DIP	DIP	\$7.00
	- 80ns	DIP	DIP	\$7.45
41256	- 120ns	DIP	DIP	\$1.80
	- 100ns	DIP	DIP	\$2.00
1MBx4	(44C1000)) 80ns	A3000 ZIP	\$40.00
1MBx4	(44C1002	2) 80ns	col static ZIF	\$46.00
1MBx8	- 100ns	simms (C	G.V.P. Hard Drive)	\$56.00
x8	- 80ns	simms		\$68.00
1MBx9	- 100ns	simms		\$62.00
	- 80ns	simms		\$73.00
4MBx9	- 80ns	simms		\$330.00
All type	es of DRA	M & me	mory modules	in stock

Please phone for the latest prices. Sales tax 20%. Overnight delivery, credit cards welcome. 1st floor, 100 Yarrara Rd, Pennant Hills 2120

PO Box 382, Pennant Hills 2120

pelham PTY LTD

Tel: (02) 980 6988

Fax: (02) 980 6991

subscription fee. Most people find it too expensive. For more information call 008 028 339.

Readers letters

FAX MODEM?

Malcolm Moy of Chittaway Bay NSW wrote in asking: "Is it really true, that it is possible to send and receive faxs with a modem and printer?"

Yes, this is true! There is a fax program for the Amiga floating around on many BBS's. Unfortunately it doesn't include instructions and no one has been able to make it work fully.

You could also try a Fax/Modem such as the 'Maestro 9600 XR Datafax' which is a 1200/2400 modem and a 9600 fax machine in one. It is fully Haves AT command set compatible and has auto dial, auto answer, auto disconnect. The cost is \$399 which is less than most modems alone - it is available from Direct Access Computer Prod-(were called nets Micro-Educational) in Newcastle on 008 025 229. Sounds great, but there's no Amiga software to support the fax side yet.

However, in the U.S.A. there are several fax modems for the Amiga. When they turn up here we'll let you know.

Call for Sysops
Any SysOps who would like their BBS reviewed - you can contact me at the address below or at my BBS. I would be happy to review your BBS if requested.

What's happening next month?? I will explain those 'AT' commands in more detail (so you actually know what they mean instead of just a list) and much much more. If you have any questions or comments, I can be contacted at:

Jonathan Scowen PO Box 162 Epping NSW 2121 Call my BBS: ALL AMIGA BBS! (02)876-8965

Until next month. happy BBSing....

Desktop Utilities

PO Box 3053, Manuka, ACT 2603 Phone: Canberra (06) 239 6658 BBS: 239 6659 Fax: 239 6619

PostDriver



The Preferences driver for Postscript devices. Send your output from any program straight to the PostScript printer you won't need HP emulation again! \$99.



Contact 1.2 \$59 New version!

The personal contacts manager/database for the Amiga Now with even more features than before, e.g.

Resizable window Autosave and autosort

· Selectable data files · Audio tone dialling Includes CalcKey, popular memory-resident calculator "It's functional, solid, powerful and compact."

Professional Amiga User

"I am most impressed by the degree of integration...with the Amiga's powerful operating system." - Amiga User International

"...very clear use of the Amiga environment." - Your Computer.



Professional Clipart 1 \$49 RRP

Structured clips For ProPage, ProDraw, & PageStream 2.1 Includes Australian themes.



The Australian Maths practice program for grades K-6. Three skill levels. Graphics and sound feature popular Australian animals. \$39

AMIGA BUREAU SERVICES

SOFTWARE DISTRIBUTION SCANNING SERVICE LASER PRINTING COLOUR INKJET PRINTING FILE CONVERSION

SHARP SCANNERS & COLOUR INKJET

e.g. JX100 Use with Scanlab 100 on any 1MB Amiga Bundled price with software \$1495 JX730 Colour Inkjet \$3995 with Amiga driver.

Now available:

CanDo (from INOVAtronics)

Object-oriented programming

CanDo Intro Pack and CanDo ProPower Pack Examples and help with CanDo programming

Power Windows

Window prototyping package for programmers

Call your dealer for prices

Flicker Free VideoTM

With Flicker Free Video (FFV) and a standard VGA or multi-frequency monitor, any Amiga® 500, 1000 or 2000 computer can produced a high quality display, free of interlace flicker and visible scan lines. Installation requires no soldering or advanced technical knowledge and frees the video slot in Amiga 2000 computers for other uses. FFV is compatible with all software, works in low and high resolutions interlaced or not, and has no genlock conflicts. FFV uses a multi-layer circuit board and surface-mounted components, packing a lot of power into a very small space. Both PAL and NTSC are automatically recognized and fully supported. Full overscan is supported, not just a limited overscan. Three megabits of random access memory are used to ensure compatibility and overscan screens as large as the Amiga can produce.

INTRODUCTORY OFFER \$649.00

AdSpeedTM

ICD expands its line of innovative enhancement products for the Amiga with the introduction of AdSpeed, a full featured 14.3 MHz 68000 accelerator for all 68000-based Amiga computers. AdSpeed differs from other accelerators by using an intelligent 16K static RAM cache to allow zero wait state execution of many operations at twice the regular speed. All programs will show improvement. AdSpeed will make your Amiga run faster than any 68000 or 68020

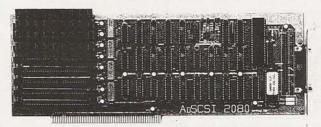


accelerator with on-board RAM. AdSpeed works with all 6800 based Amiga computers, including the 500, 1000, and 2000. Installation is simple and requires no soldering. AdSpeed has a software selectable true 7.16 MHz 68000 mode for 100% compatibility - your computer will run as if the stock CPU was installed. 32K of high speed static RAM is used for 16K of data/instruction cache and 16K of cache tag memory. A full read and write-through cache provides maximum speed.

\$549.00 BONUS \$50 Cashback on return of old 68000 (\$499.00)

AdSCSITM 2080

The fastest, most versatile SCSI host adapter (hard drive interface) available for the Amiga 2000 now comes in a new configuration. AdSCSI 2080 is not DMA, but its clean design and advanced caching driver provide greater throughput than any available DMA interface. All the features you want are included at no additional charge: autoboot from Fast File System partitions, Commodore® SCSIDirect and Rigid Disk Block conformance for no mountlist editing and compatibility with third party SCSI devices, and the



most advanced removable media support available, including automatic DiskChange and no partitioning restrictions. AdSCSI 2080 also includes sockets for adding two, four, six, or eight megabytes of RAM using 1 megabyte SIMMs. If expansion slots are in high demand then this card could be your answer.

AdSCSI 2080 OK RAM + 52MB Quantum LPS HDD BARGAIN PRICE \$999.00

AdIDETM

AdIDE™ provides an inexpensive alternative to a full SCSI interface. Sometimes called "AT drives", IDE drives have an embedded controller and are designed for connection to an AT PC bus. Nearly all drive manufacturers are now producing these low cost units.

AdIDE uses the same advanced software supplied with our AdSCSI host adapters. It delivers incredible speed and performance in a very small package. Features include autobooting from FastFileSystem partitions, A-Max II support, and more. AdIDE/40 is for the Amiga 2000. It fits underneath the CPU chip and uses no slot. The included 40 pin cable connects it to standard 3.5 inch hard drives.

AdIDE/44 is for mounting a 2.5 inch drive inside the Amiga 500. It includes the standard 44 pin cable and drive mounting brackets.

Price -

AdIDE-40 \$260.00 AdIDE-44 \$290.00 A500 Internal Hard Disk

The smallest hard drive/interface in the world is now available for mounting inside your Amiga 500! This little sweetheart gives 20 megabytes of high speed performance yet takes absolutely no desk space. Novia 20i includes complete instructions and all the hardware necessary for a simple, clean no-solder installation

INTRODUCTORY OFFER \$999.00

SYQUEST 44MB removable drive \$899.00

Australian Distributor and Registered AMIGA Hardware Developer
Maxdrive Systems Pty. Ltd.
P.O. Box 56, Darling Heights, Qld. 4350
Phone (008) 076 301 - Orders Only
Enquiries/Dealer 018 717 506. Fax: (076) 361 458
VISA - MASTERCARD - BANKCARD - CHEQUE - Accepted

Flicker Free Video, FFV, AdSpeed and AdSCSI are trademarks of ICD, Inc. Commodore is a registered trademark of Commodore Electronics Limited. Amiga is a registered trademark of Commodore - Amiga, Inc.



by Owen James

Mail-merged letters. Don't you just hate computers that make out they know you personally? Of course you do. Who can stand getting letters like:

Dear John K. Citizen.

You, John, have been selected as a lucky customer that can take advantage of our incredible discounts this month. Yes, John, so why don't you and the rest of the Citizen family come out to our warehouse and be part of this unique offer etc, etc...

They're frustrating not just because they treat you like you're a personal friend, but also because it's so darn obvious they come off a template letter yet try to pretend they don't. The problem is that they're limited in what data can be changed in each letter. Sure, you can change a name, but what if you need more control?

Enter GeoMerge! GeoMerge gives you the power that you've been longing for. With this little 'power application' you can write a mail-merge letter to twenty different friends and STILL have each one seemingly unique.

Merge gives us the 'IF' and 'ELSE' commands, which allows text to be in a letter only if certain conditions are met. Let's take an example:

If I've loaned various things to twenty of my friends and I want to write them a letter stating what they've got of mine, or a thankyou note if they've returned whatever it was, I would ordinarily have a lot of typing to do. Not so with GeoMerge. Here's my letter template:

<<title>> <<firstname>><<surname>> <<address>>, <<suburb>> <<state>> <<postcode>>

Dear <<firstname>>, Hi! How are you? What's the weather been like at <<suburb>> recently? <<IF returned="yes">> Thanks for returning my <<mine>> so promptly. I really appreciate that!
<<ELSE>> I think you may have mistakenly overlooked returning my
<<mine>>. Any chance I could get it
back soon please?<<ENDIF>>
<<IF title="Miss">> What are you doing Saturday night?
<<ELSE>> Catch up with you sometime!

And here's what our database looks like:

Yours sincerely,

title firstname surname address suburb state postcode mine returned *

Mr.

Melvin Bore 16 Main Rd Nerdsville QLD 4029 Wild World of Chess book no

Miss Cass Ette Lot B James Rd Katoomba NSW 2780 Pink Floyd tape yes

The first section of the above list is the label records. It tells *GeoMerge* what labels will be used in the document. After the asterik our data begins which will be substituted for the labels in the template document. Here's what the two sample letters would look like:

Mr. Melvin Bore 16 Main Rd, Nerdsville QLD 4029 Dear Melvin,

Hi! How are you? What's the weather been like at Nerdsville recently?

I think you may have overlooked returning my Wild World of Chess book. Any chance I could get it back soon please?

Catch up with you sometime! Yours sincerely,

Miss Cass Ette Lot B James Rd, Katoomba NSW 2780 Dear Cass,

Hi! How are you? What's the weather been like at Katoomba recently?

Thanks for returning my Pink Floyd tape so promptly. I really appreciate that!

What are you doing Saturday night?

Yours sincerely,

As you can see, because Melvin hasn't returned my book he receives a polite letter asking for it back (note the word POLITE here!).

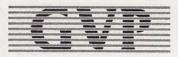
And because Cass has returned my tape on time she gets a thankyou note. Notice also that Cass is a 'Miss' (Missed out?) and so we've asked about Saturday night!

So how do we go about creating a GeoMerge document? We need to begin by thinking about the data that we need changed between letters. Obviously names will be different in each copy, and possibly addresses also. Then we need to think about other changes. For instance you may want to ask all your friends that own a 64 whether they know a cheat for a certain game, or you may want to ask your Amiga owning friends if they have any of the latest Fish disks.

To make all these sorts of changes we use what *GeoMerge* calls 'labels'. Labels are very much like the variables you use in BASIC in that they hold certain data that can be recalled and acted upon later. See the use of labels in the above letters? The template letter uses title, firstname, surname etc. With each letter that's printed, the information in these labels will change depending on the contents of our database.

We can also control the way Geo-Merge acts on the contents of our database. For example we could print certain lines of text only if it relates to

Continued on p38



THE HIGHEST PERFORMING SCSI AND RAM CONTROLLERS FOR THE AMIGA 2000 AND 500

Over 900KB/sec transfer rate on a standard AMIGA 2000. 1.5 MB/sec SERIES II standard AMIGA 2000. 1.5 Mb/sec transfer rate with a 68030 accelerator.



PH: (03) 558 9699 FAX: 558 9522

SERIES II A2000

400 MB Hard Disk + 8M RAM Card (0mb)

\$1,295

SERIES II A2000

40Q MB Hard Disk Card **\$1,189**

SERIES II A2000

80 MB Hard Disk Card **\$1,395**

SERIES II A500

400 MB Hard Disk + 8MB (0mb) RAM all in a new slim unit \$999

MICROBOTICS M501-S



Half a Meg, Clock and Switch 100% compatible with the equivalent Commodore part.

 Its built-in switch allows you to shut it down without having to uninstall it when ill-behaved software expects no more than 512K in your Amiga.

\$99

MICROBOTICS 8-UP



Maximum Memory In One Slot

Install 2,4,6 or 8 full Megabytes in one slot

 Important to BridgeCard and 2620 users who need 6MB to max their systems.

 8-UP is a power efficient (Less then an amp) zero wait state, AUTOConfiguring design.

EXPANSION SYSTEMS

BASE BOARD

0-4 MB RAM expansion for the A500

- Solderless, no-modification installation.
- Compatible with all memory
- configurations 1/2MB and 1MB chip RAM
- Quality 4 layer PCB
- Battery backed clock/calendar

\$485.00 BaseBoard with 2 MB BaseBoard with 4MB \$685.00

DATA FLYER

A2000 HardCard SCSI controller

- Supports 7 SCSI devices
- AutoBoots under 1.3 Kickstart
- Auto install software, makes formatting and partitioning a breeze

DataFlyer with 40MB Quantum \$980 11ms DataFlyer with 100MB Quantum \$1490 11ms DataFlyer with 170MB Quantum \$1950 9ms DataFlyer with 80MB Seagate \$1180 14ms

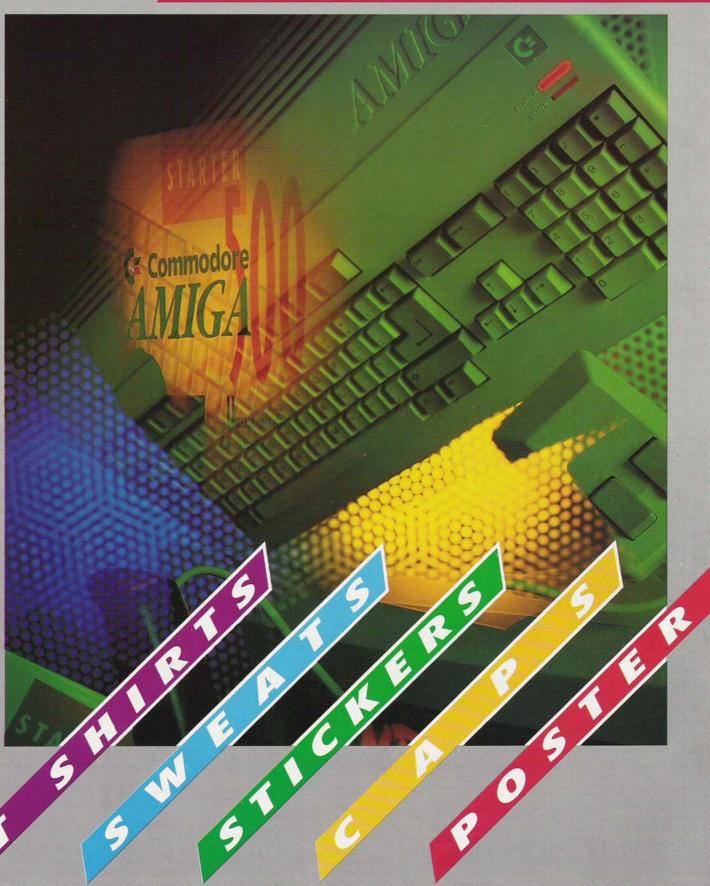
with 2 MB \$490

12 MONTHS WARRANTY ON ALL PRODUCTS

ITEM	FORMA	T QTY	PRICE	Postage: surface within Vic \$3.00 per item
				surface outside Vic \$5.00 per item
				Card type:
				Card No:
Name:		Postage	R. H. C.	Expiry:
Address:		TOTAL		
State:	P/code:	TOTAL		Signature:

POST TO: PACIFIC MICROLAB, 277 ELIZABETH ST, MELBOURNE, VIC 3000

AMIGA G E A R



AMIGA

PRIVATE COLLECTION

SWEAT: 100% Cotton with fleecy brushed inside. White with Amiga name on front, full colour print on the back. Washable. M/L/XL. Postpaid, each \$30.



CAPS: U.S. Style peaked cap. In washable yellow cotton with Amiga insignia front . Adjusts to fit all head sizes. Postpaid, each \$12.50.

POSTER: Classic Amiga poster printed full colour on heavy art paper. Ideal for wall or ceiling mounting. 762mm x 506mm.
Comes in a tube. Postpaid, each \$5.



ONLY AMIGA MAKES IT POSSIBLE



STICK IT!: New Amiga stickers. Self-adhesive vinyl. Goes on your board, bumper, case or anywhere. Postpaid, \$2.50 per set.

T's: 100% cotton baggy

T's: 100% cotton baggy T shirt. White, with Amiga name on front, full colour print on back. Washable. Sizes M-L-XL. Postpaid, each \$20.

Now you can get into Amiga gear!

As well, you'll be helping some less fortunate kids, because 10% goes to the Autistic Association. Like the man says, only Amiga makes it possible. This is just the start - get into it!

USE THIS ORDER FORM

TO: Amiga Gear, C/- The Mailing House, P.O.Box 663, Artarmon NSW 2064.

Here's my order.

This is the Amiga Gear I want.....

Please PRINT all details clearly!			
ITEM	SIZE	QTY	COST
AMIGA CAP (adjustable) \$12.50	_		14 10
AMIGA SWEAT (M/L/XL) \$30.00			
AMIGA BAGGY T (M/L/XL) \$20.00			
AMIGA POSTER (762mm x 506mm) \$5.00	-		
AMIGA STICKER (297mm x 210mm) \$2.50	_		4-34
(All items are postpaid)	TO	TAL \$	

AMIGA

10%
GOES TO THE
AUTISTIC ASSOCIATION

\$	50	
6	PEC	TAL
	Di	

Signature of card holder:

If you buy one of each (normally \$70) tick here and all you need to send us is \$60! □

SIDEAD \$60!		
NAME		
ADDRESS		
	P/C	ode
Payment by: Cheque	☐ MO	☐ Credit Card
CREDIT CARD DETAIL	LS	
☐ Bankcard ☐ Visa [Master	American Express
Card No:		
Expiry Date:		ACADI DEL
Name of card holder:		

particular people, like if they owe you normally reserved for the high-priced errors are fatal in a merged docu-\$100, if they're single, or you might want to send sympathy if they're an Atari owner! Just use the IF-ELSE commands.

That's just one very simple use of GeoMerge, but it's much more versatile than that. You can actually use data from GeoDex, GeoFile, GeoCalc, or just about any other text based GEOS application. Using the text grabber application you could probably even use data from other programs that don't run under GEOS.

You could import figures from Geo-Calc, match it with information from GeoDex or File, and create letters according to the result. Unfortunately the manual doesn't go into great detail about this, so a lot experimenting will be needed. Don't worry about this. Experimenting is one of the best ways to learn, and you may even find features that aren't supposed to exist.

Recently I was using PageSetter II on the Amiga and discovered that contrary to the manual (and what everyone else says) it does support flexible spacing in between individual characters - a powerful feature that is

publishers. Experiment with the software you own and I guarantee you will learn more than any manual can ever tell you.

GeoMerge will even reformat your document according to the size of the labels. So if one of the names in your database is Georgina Poppadopolous, GeoMerge will wrap the words that won't fit onto a line.

Another important feature of Geo-Merge is the ability to enter merge data manually. Great if you find you need to create a merge letter 'on the fly' and don't want to go through the procedure of adding to a database.

Do and don't tips

And now some 'do and don't' tips for all potential GeoMerge users:

DON'T use people's names to a ridiculous extent in a merged document. Just use them like you would if it was a normal letter.

DON'T try to pretend it isn't a merged document. Most are obvious

DO get the database right! Spelling

ment because the words of the database are quite often used more than once. Also, if you miss parts of the database you might just end up with statements like "Could you please return my Katoomba", or worse "You're a great friend, Pink Floyd tape". Get the message?

DON'T use GeoMerge for every letter you write, especially if they're to close friends. Lines like "You're my best friend, <<firstname>>", really don't go down too well!

GeoTips

With the ability to use an Apple Laser printer with GEOS came special fonts to match. In case you're wondering, these laser fonts can be used without any hassle on a normal dot-matrix printer. Some people claim that the prints made with these fonts are better than the usual ones. Give them a try and see for yourself.

We all know that GEOS is heavily copy protected for a good reason, but the trouble is that sometimes there may be a genuine need to make a back up. For example, perhaps both our system disks decide to cease doing their thing because of drive head alignment problems, or we're the lucky owner of a 1581 drive and want to boot from a 3 1/2 inch disk. All these troubles could be over if you can locate a PD program by the name of Vorpal Aid V4.

I'd first heard about this from an American Commodore newsletter that was sent to me by Marc Walters (thanks Marc!). Evidently it's been available for a while, but does any-

body know where?

One fantastic application for this program would be to make a backup of GEOS but instead of saving it to disk, putting it on an EPROM or even the Quick Brown Boxes (a battery backed memory device). Imagine it -GEOS automatically there and waiting for you with the flick of the power button. Even with saving to disk you could use faster disk turbos than GEOS provides without interfering with copy protection.

Anybody that has Vorpal Aid V4 or knows its whereabouts would be a friend for life if they contacted me!

That's just about all that time and space permits for this month. As you can see, GeoTips are a little scarce so I want yours! Send them care of:

> ACAR PO Box 288 Gladesville 2111

The **NEW EDUCATION PACK** (30 Page Manual included)

STATISTICS PACK (includes Binomial & Normal Distributions. Confidence Intervals, Hypothesis Testing, T-Distribution, Chi-Square, Fisher Distribution).

MATHS PACKS (includes Graph any Function, Solve & Integrate, Least Square Curves, Navigation, Complex Numbers & Complex Number Determinants, 3D Geometry & MUCH MORE).

STAR PACK (a planetarium display of the heavens).

SCALE (your own exam marks using mean & standard deviation).

ENGLISH-FRENCH translator. SULTAN'S PALACE (reward claimed but see separate ad for my new reward game!).

MUSIC MAKER (Type in your own songs from sheet music and hear them played).

You get THE LOT on disk for the Commodore 64 for \$29.95 from...

GARY MCCLEARY SOFTWARE PO Box 24 Emu Plains 2750

\$1000 Reward!

(One Thousand Dollars)



I've done it again! To the first person to solve

SPACE

EXPLORER

on the Commodore 64/128 AN ALL GRAPHICS **ADVENTURE** IN SPACE

(winner will be announced here)

Game is available on disk

for \$39.95 from

Gary McCleary Software

PO Box 24

Emu Plains NSW 2750

First of all, thank you to everyone who has written in to Australian Commodore and Amiga Review. Unfortunately we cannot promise to answer every letter individually, but we'll do our best. If you keep your

letter reasonably short and to the point it will be published.

We do read all letters regardless, and often the answers you're after may appear in one of our regular columns. We can answer quick questions over the phone, however we recommend you contact your local user group or software supplier for in depth problems.

Ideas to improve ACAR

I have just finished reading the January 1991 issue of ACAR, and it was most enjoyable. I feel it competes well with the majority of other Amiga and Commodore magazines which are imported into the country. Its most appealing feature of course is the price. How can it be so cheap? However I do have to make some comment on the fact that there was only one page of letters - surely there could be at least three or four. How about some sort of forum for readers to exchange hints and tips on productivity titles, not just games?

Regarding your comments on Shareware software. I think you are indeed right that you should consider any money being exchanged as payment for what you have already and you should not expect updates as a right. However, it would be quite dishonest for a programmer to keep accepting payments if they have no intention of releasing upgrades. The problems arising from this are clearly stated in this article (by Andrew Leniart).

Maybe the public domain software library companies could act as intermediary by spreading any of the programmer's correspondence amongst Amiga users and accepting the money on the programmer's behalf and then passing it on to him. In this way, the public domain distributors could pass on any updates quickly because they would have regular correspondence with the programmer. Also the distributor would know what programs were being supported by the public. This way we would know how much a programmer was making and would know when we could expect an update, or if he was making no money we could cut our losses and be happy with what we have.

Graham Rutherford Devonport, Tas

Ed: We will try to keep letters a good size so you have plenty to read in each issue. Your idea about a forum for serious users is great - we'll look at kicking off a productivity column with a letters section in our April issue.

Regarding shareware, I think you've missed the point entirely. The whole idea of shareware is to remove the middle man and keep the price down. If public domain companies had to accept money, handle corresponce, provide support etc etc... then they would in fact be acting as

Quadrant COMPUTERS, PERTH



PD FOR THE PEOPLE

"END THE PD MEGA RIP-OFF TODAY"

NOW ONLY \$2.00 INCLUDING NASHUA DISKETTE

FISH 1-480 **AMAZ** CCCC TOPIK **AMIGAN AMICUS** FAUG NZ AMIGA **AMIGOZ** PHOENIX \$2.50 COMPASS \$2-\$3.00

17 BIT COLLECTION \$3.00

PUBLIC DOMAIN POSTAGE CHARGES 1-9 DISKS \$2.00 10-20 \$3 20-30DISKS \$5

POWER PACKER PROFESSIONAL

INCREASE STORAGE BY FORTY PERCENT.

"YOU CAN'T PUMP UP AS DISK, BUT WITH POWER PACKER YOU CAN COMPRESS IT'S CONTENTS INTO LESS THAN TWO THIRD THE SPACE OTHER-WISE REQUIRED FOR STORAGE -- ON A FLOPPY OR HARD DRIVE "POWER PACKER USES SOPHISTICATED "CRUNCHING" ALGORITHMS TO REDUCE THE SIZE OF FILES, ALLOWING AN AVERAGE OF 40 PERCENT MORE MATERIAL TO BE STORED ON THE MEDIUM OF YOUR CHOICE."

POWER PACKER RRP PRICE \$39.95

NEWSFLASH DISK MAGAZINE (2DISK)

"IF YOU'RE AFTER A DISK MAGAZINE WITH A DIFFERENCE, NEWSFLASH IS FOR YOU. AS WELL AS REGULAR EDITORIALS, THIS 2 DISK MAGAZINE HAS PROGRAMS, UTILITIES, CREATIVE ART, MUSIC, DEMOS, AND OTHER NOTICES. IT ALSO INCLUDES A WORLD WIDE MESSAGE BANK, A SPECIAL SERVICE FOR READERS."

NEWSFLASH DISK MAGAZINE (2 DISK) RRP PRICE \$19.95 DEALER ENQUIRIES WELCOM

YOUR SOFTWARE AND HARDWARE RESOURCE

AMIGA ACCESSORIES AWINGA ACCESSO AWAY JOYSIKA Adaptor ACTION REPLAY MARK II Agiler Mouse \$55 Genius Mr. AMAS ADV MIDI & Sampler DIGI-VIEW GOLD V4.0 Dr. The MODEL A MIDI INT EASYL ASOB \$750 A2000 FRAMEGRABBER IPAL) KCS POWER PC BOARD MINIGEN MINIGEN MOUSE MASTER RADICAL MIDI INT SUPERCARD AMI II VIDEO BLENDER VIDI AMIGA FRAME GRABBER

GVP SERIES II HARD	DISK
GVP A500 40MG +8MB OK	\$96
GVP A500 52MG +8MB OK	\$119
GVP A500 100MG +8MB OK	\$159
GVP A2000 52MG + 8MB 0K	\$115
GVP A2000 80MG + 8MB 0K	\$125
GVP A2000 105MG + 8MB 0K	\$145
GVP A2000 170MG + 8MB 0K	\$189

DATA FLYER A2000 HD 40 MG
DATA FLYER A2000 HD 80 MB
DATA FLYER A2000 HD 100 MB
MMB BASEBOARD 1 MB Pop
4Mb BASEBOARD 2Mb Pop
4Mb BASEBOARD 3Mb Pop
4Mb BASEBOARD 4Mb Pop
3.5*EXT DISK DRIVE \$1095 \$1195 \$310 \$399 \$489 \$585 3.5" EXT DISK DRIVE 512K RAM EXP CLOCK & Switch 3.5" NASHUA DISKETTES

PRINTERS ON SPECIAL

STAR NX-100CL STARLC-200 STAR LC-24-200 CL EPSON LO-400

> NEVER UNDERSOLD ON PRICE AND SERVICE

AMIGA SOFTWARE

AMIGA SOFTWARE
3-D CONSTRUCTION KIT
AMIGA VISION
AMOS THE CREATOR
AMIGA THE CREATOR
AMIGA THE CREATOR
ALDIO ENGINEER
BARS AND PIPES
CAN DO
CAN DO PRO PACK
CAN DO INTRO PACK
CROSS DOS V.4
CYGNUS ED V2.0
DISKMASTER V1.4
DBMAN V
DOS 2 DOS Q
DRIS COPYIST APP
DRIS TICER CUB
DRIS TICER CUB
DRIS TICER CUB
DRIS TICER CUB
CASTED AFAM OR MCGEE
LATTICE CO DEV SYSTEM
MAC 2 DOS NIC INTERFACE
MASPLAN PILUS
MUSIC X JUNIOR
ORGAMIZE (SPECIAL)
PAGESTREAM V2.1

POSTAGE CHARGES

Australia Wide Courier AIR FREIGHT 3KGS FOR \$5.00 CALL FOR SURFACE RATES

26 Rochester Way Dianella P.O. Box 380 Morley WA 6062 Pager (016) 983 333 Facsimile (09) 375 1113

Phone (09) 375 1933

COMMODORE 64/128 LOMMODOHE 64/128

APROTEK CART EXPANDER
APROTEK MODEM ADAPTOR
APROTEK USER PORT EXT
GEOPRINT CABLE
FREEZE MACHINE
KCS POWER CARTRIDGE
SLIMLINE CONVERS CASING
TURBOLOAS CARTRIDGE
XETEC SUPER GRAPHICS SIN
XETEC SUPER GRAPHICS GOT 135 XETEC SUPER GRAPHICS GOLD\$279 \$55 VSI IBM TO 64 ADAPTOR \$75 GEOS V2.0 64 GEOS V2.0 128 GEOCALC 128 GEOCHATT 64/128 GEODEX 64 GEOPLE 64 GEOFILE 128 GEOPROGRAMMER 64/128 GEOS INT FONT PK 64/128

JOHN FOR THE STREET OF THE STR \$64 \$55 \$85 \$84 SUPER C 64 OR 128 SUPER PASCAL 64 OR 129 SUPERSCRIPT 64 OR 128 SWIFTCALC Inc Sideways

> **NEW EXTENSIVE** PRODUCT CATALOGUE \$2.00 for P&P PLEASE STATE YOUR COMPUTER TYPE

Trading hours West Coast 8am-6pm Mon-Fri



LOST

The availability of more Memory for the Amiga 1000 or 500

FOUND

1 Meg. Auto Configuring Memory boards, designed and manufactured by XEL

REWARD

provides you with either a 1 Meg fully populated board or, 2 x 1 Meg unpopulated boards

MEMORY SPECIAL

512K Chip Packs Rec. ret \$48. 25% Dis. applies if purchased with XEL boards

Pty Ltd

G.P.O. BOX 121 Adelaide, 5001 Phone 08-2317396 or 018-824648 anytime DEALER ENQUIRIES WELCOME

a commercial distributor. The whole business of updates and getting value for money is a complex and cloudy subject. On closer examination you'll find what is promised and delivered differs from one program to the next. Watch our public domain column for discussions of these issues.

1581 User

I am writing to you regarding a small magazine that we have set up for Commodore 1581 (3 1/2") disk drive owners. As you are aware, Commodore never saw fit to import these drives, and only one Australian dealer (HPD) saw fit to bring them in. Many more, however, have been brought back via friends and relatives, etc., and as such it is anybody's guess as to how many of these are in Australia.

A small band of West Coast 1581 users have decided to set up a Magazine as a support group for those who won this scarce drive. We aim to establish a reference of what will and won't work on a 1581. The magazine is aimed at 1581 users in particular, but may also be of interest to those with Hard Drives, or other non-1541 compatible drives. We feel that a magazine is the preferred option to a bulletin-board system, as benefit would be restricted to those with modems, and would be more costly, due to most users needing to pay STD rates to connect.

Our support is aimed directly at the 64/128 users running 1581's or other non-1541 compatible drives. Subscription is \$18 per year for 6 issues, and cheques and money orders can be sent to:

1581 User PO Box 323 Maddington WA 6109

Phil Arntzen Editor 1581 User.

Ed: Well done, guys. We look forward to seeing your first issue.

How to market games?

I want to become a graphic artist/game designer. But after designing a couple of games, I don't know where to send them, so could you list some names and address of publishers or whatever for me, thanks.

P.S. The games are a mixture of arcade/adventure and strategy.

Dean Grubb

Ed: Try sending us a copy for starters - we may well be able to point you in the right directions.

THE BEST IN AMIGA PUBLIC DOMAIN!

Get your PD/Shareware software from the people who get it first and know it best or make it. We don't send out viruses, or single-program disks. We give away a free Catalogue-disk with Virus-killer & tutorials, updatable free at any time, and we have no postage charges. We know the Amiga and have supported it from the start we've been producing Megadisc, the all-Australian disk-magazine for the Amiga since 1986. We can help when problems occur. We invented Theme Disks, and have the best. Call and find out. Toll-free. Our prices are the most competitive, and our service is immediate. Both are even better if you become a subscriber to our disk-magazine, which is unique! Try it.

OUR COLLECTIONS Uniquely Ours: Topik Disks "Best of Fish" Disks Megadisc Theme Disks - Animation, Demos, Utilities, Graphics, and others The Old Standards: The AmigaLibDisks (Fish) T.B.A.G. & AmigOz Disks The Defunct but available:

Amicus, Amigan, F.A.U.G., C.C.C., etc.

MEGADISC, P. O. BOX 759, CROWS NEST 2065. TOLL-FREE: 008 227 418 ENQUIRIES: (02) 9593692 FAX: (02) 9593525. We take major credit cards by mail or phone, and we are FAST!

SCANNERS FROM \$299

The IMG printer head scanner uses fibre optics to "read" the image - up to A4 size and is only \$299!



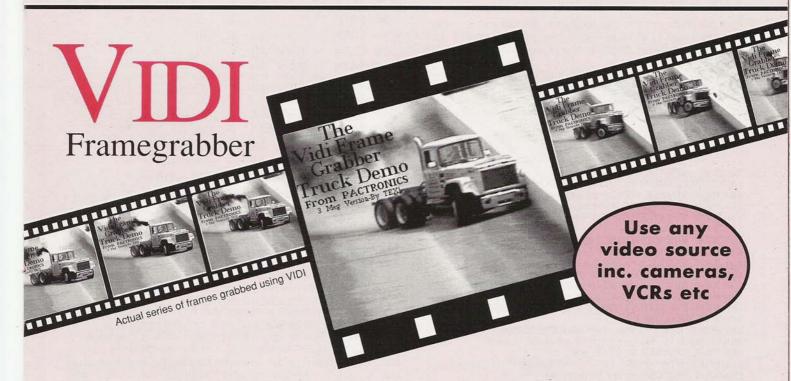
Available From:

Maxwells Office Euipment (Vic.) Computer Spot (All Branches) Grace Bros., The Gamesman, Myer, Harvey Norman, Game Wizard, Harris Scarfe, Midi Mouse Computers and all good computer retailers.

HAND HELD SCANNERS

Type 10: The only AMIGA Scanner (we know of) with OCR software that allows you to scan TEXT! Then use it in your word processor, desktop publishing package etc. Can easily be trained to recognise ANY font (but recognises most fonts automatically).

Type 6: You want colour, we got colour! A 4096, H.A.M. mode scanner at a believable price. The TYPE 6 HAND SCANNER can scan in a full colour image in 16 or 32 colour resolution, Extra Half Bright Mode or H.A.M. (4096 colour) mode.



Now you can make your own Clip-Art, Video Effects and digitsed images (even animations in black and white). Quickly and inexpensively.

Only \$399 with Vidi Chrome colour software and filters.

* RGB splitter also available.



For your nearest retailer contact:

N.S.W.: Pactronics Pty Ltd, 98 Carnarvon St, Silverwater. (02) 748 4700 Victoria: Pactronics Pty Ltd, 55-55 Johnston Street, Fitzroy. (03) 419 4644 Queensland: Pactronics Pty Ltd, 12 Stratton St, Newstead, 4006. (07) 854 1982 South Australia: Refer Head Office or Victoria.

Western Australia: Pactronics, unit 13, 133 High Rd Willeton 6155. (09) 354 1122



by Greg Perry

Now we have our sprites set up, let's look at how we can use them in our own programs.

We will look at a number of simple but interesting techniques which you should be able to adapt to your

own programs. Example: sprites as string data. The following program displays three sprites using the same sprite data for each.

The sprite pattern of the number 64 sitting under a palm tree, is set up in the data statements as string data. This pattern can be readily changed by editing the program in the normal manner.

Calculation of the correct 63 numbers for the sprite pattern is done by dissecting the strings (check out the method used and work out how it does it, Lines 320-350) and the numbers are shown on the screen as they are calculated. An "A" in the data string is taken as a screen dot with bit value of 1 and a space is taken as bit value of 0. The sprites used are sprite numbers 0-2.

Points to note:

All three sprites use the same data block

 Remember that sprite 0 has priority over 1 and 2 and so will appear over the top of the images of the other

 The sprite-background priority has been altered for sprite 1 so that it will pass underneath the screen image.

- · All the sprites are programmed to randomly expand in either direction when they cross at the centre of their travels.
- For simplicity, sprite X position is never greater than

Program: SPRITE GENERATOR 10 REM (C) GREG PERRY, BRISBANE 1984 100 REM SIMPLE THREE SPRITE GENERATOR 110 REM SN=SPRITE NUMBER 120 REM V=START OF VIC CHIP 130 V=53248 140 REM SET EXPANDED SPRITES 150 POKE V+23,7: POKE V+29,7 160 REM CLEAR SPRITE RAM AREAS 170 FOR I=832 TO 1023: POKE I,o: NEXT 180 REM SET SPRITE POINTERS TO DATA BLOCK 190 POKE 2040,13: POKE 2041,13: POKE 2042,13 200 REM POSITION SPRITE X AND Y ON SCREEN 210 FOR SN=0 TO 2 220 POKE V+SN*2,100+SN*10: REM X POS 230 POKE V+1+SN*2,100+SN*20: REM Y POS 240 REM ENABLE SPRITE SN 250 POKE V+21, PEEK (V+21) OR (2^SN) 260 REM SET Colour OF SPRITE SN 270 POKE V+39+SN,2+SN: NEXT 280 REM READ DATA AND CALCULATE BYTE NUMBERS 290 FOR ROW=0 TO 20 300 READ S\$: PRINT S\$; 310 FOR NO=0 TO 2:N=0 320 FOR BIT=7 TO 0 STEP -1 330 REM CALCULATE NUMBER 340 IF MID\$(\$\$,1+NO*8+7-BIT,1)="A" THEN N=N+2^BIT 350 NEXT BIT

360 REM PUT NUMBER INTO IMAGE MAP

370 POKE 832+ROW*3+NO,N: PRINT N; 380 NEXT NO: PRINT 390 NEXT ROW 400 REM DISPLAY BACKGROUND AND MOVE SPRITES 410 PRINT "[CLR,DOWN4,RVS]";: FOR I=1 TO 40 * 6: PRINT "[<Q>]";: NEXT 420 REM SET SPRITE 1 TO UNDER SCREEN 430 POKE V+27,2 440 REM NOT EXPAND X AND Y 450 POKE V+23,0: POKE V+29,0 460 REM MOVE SPRITES 470 S=255: FOR I=1 TO 255 480 POKE V,I: POKE V+1,I 490 POKE V+2,S-I: POKE V+3,S-I 500 POKE V+4,I: POKE V+5,S-I 510 IF I<>128 THEN 570 520 REM RANDOMLY EXPAND SPRITES IN X &/OR Y 530 IF RND (0)>.2 THEN POKE V+23, RND (0)*7+.5 540 IF RND (0)>.2 THEN POKE V+29, RND (0)*7+.5 570 NEXT : GOTO 450 690 REM SPRITE DATA

700	REM	"76	543	21076	5432	107	765432	210)"	
710	DATA	11	1	AAA	A	A	AA		11	
720	DATA	н	A	AAAA	A	AAA	AAA		11	
730	DATA	11	AA	4	AAAAA	1	AA		11	
740	DATA	11	AA	A	A	A	AA		11	
750	DATA	" /	AF		A		AF	1	11	
760	DATA	"AF	4		A		F	AA	11	
770	DATA	"A			Α			A	11	
780	DATA	n			A				11	
790	DATA	**	AAA	AAAA	A	AA			11	
800	DATA	11	AAA	AAAA	A	AA			11	
810	DATA	11	AA	AA	A	AA			11	
820	DATA	11	AA		A	AA			n	
830	DATA	11	AA		A	AA			11	
840	DATA	11	AAA	AAAA	A	AA	AA		11	
850	DATA	11		AAAA	A	AA	AA		en:	
860	DATA	11	AA	AA	A	AA	AA		11	
870	DATA		AA	AA	A	AA	AAAAA		11	
880	DATA	н	AAA	AAAA	Α	AAA	AAAAA		11	
890	DATA	"A	AAA	AAAA	AAA		AA	A	11	
900	DATA				AAAAA	1		Α	11	
910	DATA			AZ-10-10-10-10-10-10-10-10-10-10-10-10-10-	1000		AAAAAA	100	n	
STATE OF THE STATE	Service of the service of	1000	THE RESERVE	N114-114-11-1000	alconduction of	500000	TAX STATE OF THE STATE OF	0.00		

Exercises

- 1. Design your own sprite in data statements.
- 2. Change sprite colours.
- Change sprite movement routine.
- 4. Change movement to include full range of X 0-344.

5. Change expansion to X or Y expand only.

Example: Bouncing and full range of X. To program a sprite to "bounce" around the visible screen area, like a ball on a billiard table, involves increasing or decreasing the X and Y coordinates and ensuring that, when the boundary (as defined above) is reached, the corresponding X or Y movement is reversed in direction. This is shown by the following subroutine.

Add these Lines to the program above.

550 REM RANDOMLY BOUNCE SPRITE 560 IF RND(0)>.2 THEN GOSUB 590 580 REM BOUNCE SPRITE AROUND SCREEN WE CAN BEAT ANY ADVERTISED PRICE! BUT WE SELDOM HAVE TO - OUR PRICES ARE THE LOWEST! (IF YOU SEE A LOWER PRICED ITEM, TELL US, IF YOU DON'T, TELL YOUR FRIENDS.)



42

57

57

29 77

57

57

PHONE: (02) 519 5323 C64/128 Ninja Spirit .. Geos Int'l Fonts Pack **AMIGA** New Zealand Story ... Pools of Radiance Home Video Prod. Mini Office II Newsroom Music Const Set Project Stealth Fight'r 47 37 ADVENTURE SPORTS SPREADSHEETS ENTERTAINMENT ARCADE Bandit Kings of A.C. . 87 4D Boxing .. Advantage 257 American Civil War ... 52 Apprentice. 57 News Maker 128 Reach for the Stars .. 47 DG Calc rachnophobla Cellca GT 57 85 77 Back to the Future Red Storm Rising Buck Rogers Days Of Thunder Barbarian II 67 Atomic Robokid ... 57 Halcalc Russia 52 Awesome (w/T shirt) . Back to the Future III Cadaver Greg Norman Golf Hard Ball 2 77 67 57 110 Bard's Tale Trilogy Superplan Pocket Series ea. Secret of Silver Blade Battle Chess Captive Power Cartridge Printmaster Plus Print Power Skl or Die Harley Davidson 57 Honda RVF 47 Indianapolis 500 47 GRAPHICS Badlands Castle Master 57 Batman the Movie Starlord .. Champions Krynn Bar Games Comic Setter .. Castle Master Street Rod Battlestorm Champions of Raj Chaos Strikes Back ... Credit Text Scrol Deluxe Paint III 62 Test Drive II Jack Nicklaus Golf 57 Chessmaster 2100 ... TurricanTV Sports Football ... Chrono Quest II Codename Iceman ... Colony Crime Wave Kick Off II Deluxe Print II 67 57 Champs of Krynn Superscript 64 47 Chase HQ Omni Play Basketball 57 Cyberball 47 Colonels Bequest 67 Pro Tennis 2 67 Deluxe Video III 38 Wall Street The Print Shop 72 Death Trap Corporation 57 Conquest of Camelot 67 Curse Azure Bonds .. Design 3-D 129 Digi-Mate 3 57 Winners italy 1990 ... Top 20 Tools Dick Tracy . 57 Tennis Cup 47 Video Basic 64 Wizadry V 57 TV Sport Basketball .. 67 Dragon Breed Dragon Strike 57 Digi-Paint 3 X Out Word Writer 5 Dragon Flight Double Dragon II Dragon's Breath 77 Drakkhen 57 TV Sport Football 67 World Cup Soccer 47 Dragon Ninja 77 Digi-View Gold 4 249 38 Elvira Digi-Works 3D 175 PRODUCTIVITY FREEZE Dragon's Lair II 87 Dungeon Master 57 38 'NOTE - WHEN COMPARING PRICES WE F14 Tomcat F15 Strike Eagle F16 Combat Pilot Action Replay VI 129 Dyter 07 Elvira MACHINE Blitz 64 38 Cobol 64 57 Hero's Quest 67 E-Motion OFFER FREE!!! 57 ONLY \$55 E-Swat Expert Cartridge 139 Fast Load Cartridge . 47 Fire and Forget II 57 Hunt for Red October 48 Flimbo's Quest **FDUCATIONAL** Ghouls and Ghosts ... Greg Norman Golf POSTAGE & HANDLING IN AUSTRALIA Final Cartridge III 119 Font Master II 64 77 Alge Blaster Khalaan King's Quest IV Knights of Crystallion Allen Addition SIMUL ATORS mer Flat Ham Director II .. Ghostbusters II 47 Hard Drivin' WE ALSO CARRY TITLES Animal Kingdom A10 Tank Killer Director Tool Kit Carmen Sandiego ea. Decimal Dungeon ... FOR: C64 CASSETTE IBM, ATARIST AND AMSTRAD. Ghost'n Goblins 57 Gold of the Aztècs 57 Legend of Fairghall ... 57 Leisure Suit Larry I/II. 57 38 Heroes 38 F16 Combat Pliot Introcad Plus Demolition Division ... Family Fued 39 Gremlins 2 57 Leisure Suit Larry III . F19 Stealth Fighter ... 67 Hot Rod Lights, Cameras, Act. Hunt for Red October Hammerfist Loom Falcon Mission Modeller 3D 109 Geos 64 V2.0 57 Fraction Action 57 Manhunter II Hardball II .. 52 Geos 128 V2.0 Math Blaster 57 Hard Drin' II 57 Might & Magic II 57 67 Goecale 128 Mavis Beacon Typing Kick Off II Mortville Manor labido . 67 47 Geochart 64/128 Operation Stealth Flight of the Intruder ., 77 Minus Mission Number Farm Photon Paint II 119 Geodex 64 37 James Pond 57 Pirates .. 67 Last Ninla II Mig 29 Their Finest Hour Geofile 64 Kld Gloves 57 Killing Game Show ... 57 Police Quest I/II 37 Sim City Geofile 128 Speed Reader II Pools of Radiance 48 67 Sculpt 3DXL 249 Mean Street Shogun Spell It Lemmings Sculpt 4D Jnr 219 Spelling Wiz Wheel of Fortune Might & Magic II 38 AMIGA 500 BUSINESS TV Text Professional 179
 Day By Day
 57

 Desktop Budget
 95

 Easy Ledgers
 375

 Gold Disk Office
 359
 onopoly MAIL ORDER FORM **512K RAM** X-Cad Designer 219 HOW TO ORDER USING THIS FORM: **ONLY** \$89 Home Accounts 85 1. Select your products from the ad. 119 Audio Master III 119 System 3 2. Fill out this form. Inc. on/off switch and clock The Accountant 399 3. Mail this order form to: LOGICO Works Platinum 185 Space Quest III . 57 Marrickville Metro Shopping Centre Dr T's Copylet DTP .. 399 Dr T's Tiger Cub 110 Lotus Esprit Turbo Theme Park Mystery DATA BASE Shop 3A/36 Victoria Road Thrill Winning Midnight Resistance . 57 Master Tracks Pro 499 Marrickville NSW 2204 Mighty Bombjack N.A.R.C Untouchables Perfect Sound 169 67 Xenomorph .. NAME: Night Hunter 57 LANGUAGES Superbase Nightbreed 52 Ninja Warriors 57 STRATEGY 120 AC/Basic 269 ADDRESS: Austerlitz ... Superbase Pro 275 Amiga Vision 175 67 Nitro . Bal. of Power 1990 .. Pang Betrayal ... 67 PageStream 2.1 POST CODE: Powerdrift 57 Preclous Metal 57 Borodino ... Carrier Command this month \$345 57 PHONE: ()_ DATE SENT: Puzznic 57 Resolution 101 57 Conflict Europe Only PageStream DTP allows you to Courtroom 67 Rick Dangerous II edit and colour ProDraw clips I 57 Just one more reason why PageStream QTY PRODUCT/PROGRAM NAME COMPUTER DISK TYPE PRICE Fire Brigade ... 47 Rock & Roll 47 Shadow Beast II 77 Genghis Khan DESKTOP PUB. Amos 115 Simulcra 47 Harpoon Outline Fonts 259 Imperlum 47 Pagesetter II 165 Assemoro 140 Sly Spy Secret Agent . 57 Khalaan M1 Tank Platoon 359 Aztec C Pro Pagestream V2 Space Ace 87 Pagestream fonts ea. 52 Pro Page 1.3 279 Benchmark Mod-2 ... 269 Space Rogue 65 North & South 57 Professional Draw 2 . 249 Publishers Choice 185 Super Monaco GP 67 Cil Imperium Super Monaco GP 67
Super Off Road 57
Teenage Ninja Turtles 57
Test Drive II 57
Teet Drive II Disks 38 METHOD OF PAYMENT: Please tick POSTAL CHARGE FREE Over Run BANKCARD MASTERCARD
VISA MERICAN EXPRESS
CHEQUE MONEY ORDER Powermonger UTILITIES WORD PROCESS'S Prince of Persia 57 CII-Mate 65 Rorke's Drift TOTAL \$ Cross Dos V4.0 57 The spy who loved me 57
Torvak The Warrier 57
Turn It 57
Turrican I & II (each)... 57 Cygnused Pro
Excellence 2 Second Front 57 99 269 Digal Disk Mechanic CREDIT CARD USERS ONLY: 75 Gold Disk Type Kind Words II 175 Diskmaster 38 57 Pen Pal 57 Unreal Supremacy Cradit Card No: Exp. Date Wings Of Fury 67 Wrath of the Demon ... 57 Mac 2 Dos Team Yankee 67 Pixel Script Prowrite V3.0 169 Uma II 57 Superback Xenon II Warhead 57 Signature: _ Xiphos 57 57



Phone: (02) 979 5833 Fax: (02) 979 6629

WE HAVE

A.P.B. \$49.95 ACTION FIGHTER \$69.95 ACTION STAITONS STRATEGY \$69.95 ADVANCED TACTICAL FIGHTER II \$69.95 ALL DOGS GO TO HEAVEN \$69.95 AMOS GAME CREATOR \$125.00 ANARCHY \$59.95 ASTATE \$49.95 ASTATE \$49.95 ASTATE \$49.95 ASTATE \$49.95 ASTOMIX \$49.95 ATOMIX \$49.95 BAT \$99.95 BATMAN - CAPED CRUSADER \$45.00 BATTLE SQUADRON \$59.95 BATLE SQUADRON \$59.95 BATLE VALLEY \$49.95

MAL'S THUMBS UP

☆☆ SWIV ☆☆
TURRICAN II DAS BOOT
PRINCE OF PERSIA

BATTLESHIPS	\$19.95
BERLIN - EAST V WEST	\$59.95
BATTLE STORM	\$79.95
BIO CHALLENGE	\$49.95
BLITZKRIEG STRATEGY	\$79.95
BLOCKBUSTER PAK - SSI	\$59.95
BLOODWYCH	\$59.95
BLUE ANGEL 69	\$49.95
BLUE MAX	\$69.95
BORODINO	\$49.95
BOULDERDASH CONSTRUCTION SET	\$16.95
BRAIN SCRAMBLER - JIGSAW	\$29.95
BREACH 2	\$59.95
B.S.S. JANE SEYMOUR	\$69.95
BUBBLE BOBBLE - 2 CAN PLAY	\$59.95
BUCK ROGERS-C/DOWN DOOMSDAY	\$49.95
BUFFALO BILLS RODEO	\$59.95
CAPTIVE	\$69.95
CONQUESTS OF CAMELOT (SIERRA)	\$59.95
CARRIER COMMAND	\$49.00
CARTHAGE	\$69.95
CARVE UP	\$69.95
CASTLE WARRIOR	\$69.95
CHAMPIONS OF KRYNN	\$54.95
CHARIOTS OF WRATH - SPECIAL	\$49.95
CHESS CHAMPION 2175	\$79.95
CHESS PLAYER 2150	\$69.95
CHRONO QUEST II	\$79.95
CINEMAWARE COMP - 3 FABULOUS WORLDS	\$59.95
(ROCKET RANGER+THREE STOOGES+SINBAL	
CINEMAWARE COMP - 3 MORE WORLDS	\$59.95
(SDI+DEFENDER OF CROWN+KING OF CHICA	GO)
CODENAME ICE MAN (SIERRA)	\$59.95
COLONEL'S BEQUEST	\$59.95
COLORADO	\$69.95
COMMANDOS PACK	\$59.95
CONTACT	\$59.95
CRAZY SHOT - USES GUN/MOUSE	\$49.95
CRIBBAGE & GIN KING	\$59.95
CYBERBALL	\$49.95
CYBERWORLD	\$59.95
DAMOCLES	\$49.95
DANGER FREAK	\$59.95
DARIUS+	\$49.95
DARK CENTURY	\$59.95
DARK SIDE	\$49.95
DAS BOOT - U-BOAT SIM - GREATI	\$69.95
DAY OF THE PHAROH	\$54.95
DAY OF THE VIPER	\$59.95
DAYS OF THUNDER	\$69.95
DEATH TRAP	\$59.95
DEBUT	\$59.95

DEMONS TOMB	\$54.95
DEMONS WINTER	\$45.95
DR. PLUMMETS HOUSE OF FLUX	\$49.95
DR. DOOMS REVENGE - SPECIAL	\$49.95
DRAGON FLIGHT	\$79.95
	\$59.95
DRAGON'S LAIR II	
DRAGON SPIRIT - SPECIAL	\$39.00
DRAGONSTRIKE	\$59.95
B DREAM ZONE	\$39.95
DUCK TALES - QUEST FOR GOLD	\$59.95
DUNGEON MASTER 1 MEG ONLY	\$59.95
§ DYNASTY WARS	\$59.95
ELITE GAMES PACK VOL 1	\$49.95
EMPEROR OF THE MINES	\$49.95
ESCAPE - From planet robot monsters	\$49.95
§ ESKIMO GAMES	\$49.95
EUROPEAN DREAMS - COMPILATION	\$59.95
EXTRA TIME - FOR KICKOFF	\$59.95
F-16 FALCON	\$59.95
F-19 STEALTH FIGHTER	\$89.95
FA/18 INTERCEPTOR	\$45.95
FALCON MISSION DISK 2	\$49.95
FACES TRIS III	\$59.95
FIENDISH FREDDY - SPECIAL	\$49.00
FIGHTER BOMBER MISSION DISK	\$59.95
FIRE & FORGET II	\$59.95
FIST OF FURY COMP - SHINOBI-DYNAMITE	000.00
DUX-NINJA WARRIORS-DOUBLE DRAGON	\$59.95
FLIPPIT + MAGNOSE	\$59.95
FLOOD	\$49.95
FORGOTTEN WORLDS - SPECIAL	\$49.95
FUSION	\$45.00
FUTURE BASKETBALL	\$59.95
FUTURE BIKE (SIM)	\$39.95
FUTURE CLASSICS - COMP	\$59.95
FUTURE DREAMS - COMP	\$59.95
GHOSTS & GOBLINS	\$49.95
GLOBULOUS	\$59.95
GOLD FEVER PACK	\$49.95
GOLD OF THE AZTECS	\$59.95
GOLDRUSH - SIERRA	\$61.95
GRAND NATIONAL (Horses)	\$49.95
GRAND SLAM TENNIS	\$16.95
GREMLINS 2	\$59.95
HARD DRIVIN' 2	\$69.95
HARLEY DAVIDSON BIKES	\$59.95
HARPOON	\$69.95
HEATWAVE (Boat racing)	\$59.95
HEWSONS PREMIER COLLECTION	\$49.95
HILLSFAR - DUNGEONS & DRAGONS	\$45.95
HOLE IN ONE GOLF - MINI -144 HOLE	\$44.95
HONDA RVF - PLAYS WELL	\$49.95
HONG KONG PHOOEY	\$39.95
HOYLES SOLITAIRE VOL 2 HOYLES SOLITAIRE VOL 1	\$69.95
	\$59.95
HUNT FOR RED OCTOBER	\$44.95
INDIANA JONES LAST CRUSADE	\$69.95
INDY 500	\$49.95
	\$59.95
INTERPHASE	\$59.95
ISHIDO	\$69.95
JOKER X-WORD	\$19.00
JUDGE DREDD	\$59.95
.IUMPING.JACKSON	\$49.95
KEEF THE THIEF - ADVENTURE	\$49.95
KELLY X	\$19.95
KENNY DALGLISH SOCCER	\$49.95
KHALAAN	\$59.95
KICK OFF	\$49.95
KICK OFF - EXTRA TIME	\$59.95
KID GLOVES	\$69.95
KILLING GAME SHOW	\$69.95
KINGS QUEST I	\$49.95
	\$69.95
KINGS QUEST II	\$69.95
KINGS QUEST III	
KONIX SPEEDKING JOYSTICK - GREAT	\$39.95
LEGEND DJEL	\$49.95
LEGEND OF FAERGAIL - MAL LIKES IT	\$69.95
EISURE SUIT LARRY	\$49.95

LEISURE SUIT LARRY II	\$49.95
LEISURE SUIT LARRY III	\$59.95
LEMMINGS - DARE YOU TO PUT IT DOWN	\$69.95
LICENSE TO KILL LOST DUTCHMAN'S MINE	\$49.95 \$69.95
LOST PATROL	\$59.95
LOTUS ESPIRIT TURBO CHALLENGE	\$69.95
M1 TANK PLATOON	\$89.95
MANHUNTER - NEW YORK (Sierra) MANHUNTER 2 (San Francisco)	\$49.95 \$59.95
MANNIX	\$59.95
MATRIX MARAUDERS	\$59.95
MAYDAY SQUAD	\$49.95
MICROPROSE SOCCER MIDNIGHT RESISTANCE	\$59.95 \$59.95
MIDWINTER	\$79.95
MIGHT & MAGIC II	\$59.95
MIND GAMES	\$69.95
MR. HELI - SPECIAL MURDER	\$49.95 \$59.95
MYSTICAL	\$69.95
NARCO POLICE	\$59.95
NEUROMANCER	\$59.95
NIGHT BREED ACTION NIGHT HUNTER	\$59.95 \$59.95
NITRO	\$59.95
NUCLEAR WAR	\$49.95
OCEAN ACTION PACK	\$59.95
OIL EMPORIUM ONSLAUGHT	\$54.95 \$49.95
OPERATION COMBAT	\$79.95
OPERATION HARRIER	\$59.95
OPERATION STEALTH	\$59.95
ORIENTAL GAMES OVERRUN	\$69.95 \$49.95
PANG	\$59.95
PARADROID	\$59.95
PERSIAN GULF INFERNO	\$69.95
PHANTASM PHASER GUN - SPECIAL	\$29.95 \$39.95
PICTIONARY	\$45.95
PIPE MANIA	\$59.95
PLANET PROBE	\$49.95
PLOTTING POLICE QUEST	\$59.95 \$61.95
POLICE QUEST 2	\$61.95
POOL OF RADIANCE (D&D)	\$64.95
POPULOUS	\$45.95
POWERDROME POWERDRIFT	\$45.95 \$59.95
POWERMONGER	\$49.95
PRINCE OF PERSIA	\$64.95
PRO TENNIS TOUR 2	\$69.95
PROJECT YLE PUFFY'S SAGA	\$45.95 \$59.95
PURPLE SATIN DAY	\$49.95
PUZZNIC - ADDICTIVE	\$59.95
PYSCHO OLIADRALIEN	\$49.95 \$69.95
QUADRALIEN QUARTZ	\$49.95
QUARTZ RAINBOW WARRIOR RALLY CROSS RED LIGHTNING RED STORM RISING REALM OF THE TROLLS RICK DANGEROUS 2 RISK ROADWARS ROBOCOP 2 ROGUE TROPPER RUFF AND REDDY RVF HONDA SAFARI GUNS SCRAMBLE SPIRITS SHADOW OF THE BEAST II SIM CITY TERRAIN EDITOR SIM CITY GRAPHICS 1 - ANCIENT CITIES SIM CITY GRAPHICS 2 -FUTURE CITIES	\$59.95
RALLY CROSS	\$49.95
RED LIGHTNING	\$54.95
REALM OF THE TROLLS	\$61.95
RICK DANGEROUS 2	\$59.95
RISK	\$29.95
HONDOOD 2	\$50.05
ROGUE TROPPER	\$64.95
RUFF AND REDDY	\$39.95
RVF HONDA	\$49.95
SAFARI GUNS	\$49.95
SHADOW OF THE BEAST II	\$79.95
SIM CITY	\$84.95
SIM CITY TERRAIN EDITOR	\$34.95
SIM CITY GRAPHICS 1 - ANCIENT CITIES	\$59.95
QUADRALIEN QUARTZ RAINBOW WARRIOR RALLY CROSS RED LIGHTNING RED STORM RISING REALM OF THE TROLLS RICK DANGEROUS 2 RISK ROADWARS ROBOCOP 2 ROGUE TROPPER RUFF AND REDDY RVF HONDA SAFARI GUNS SCRAMBLE SPIRITS SHADOW OF THE BEAST II SIM CITY TERRAIN EDITOR SIM CITY GRAPHICS 2 -FUTURE CITIES SIM CITY GRAPHICS 2 -FUTURE CITIES	,00.00

AMIGA 3000's

Phone: (02) 979 5833 Fax: (02) 979 6629



SIMILCRA	\$49.95
SKIDOO	\$39.95
SKYCHASE	\$52.95
SLEEPING GODS LIE	\$69.95
SOLITAIRE - VOL 1 SEA HAVEN	\$39.95
SOLITAIRE - VOL 2 CALCULATION	\$39.95
SOLITAIRE - VOL 3 ACCORDION	\$39.95
SPACE RACER	\$49.95
SPACE SCHOOL	\$39.95
SPACE QUEST	\$44.95
SPACE QUEST II	\$59.95
SPACE QUEST III	\$59.95
SPEEDBALL 2	\$39.95
SPY V SPY	\$16.95
SPY V SPY - ARCTIC ANTICS	\$16.95
SPY V SPY - ISLAND CAPER	\$16.95
STAR BREAKER	\$49.95
STAR CURSOR J/S - 3 YR GUARANTEE	\$54.95
STEEL	\$49.95
SUMMER OLYMPIAD	\$29.95
SUPERMAN - MAN OF STEEL	\$49.95
STORM ACROSS EUROPE	\$49.95
STRIDER II	\$59.95
STUN RUNNER	\$69.95
SUPER SQWEEK	\$59.95
* SUPREMACY - NEIL LOVES IT	\$69.95
SWIV - SILKWORM SEQUEL T.M.N. TURTLES	\$69.95
TEAM SUZUKI	\$69.95 \$69.95
TEAM YANKEE	\$89.95
THE BIG ONE - LOTTO SYSTEMS	\$19.95
THE POWER PACK	\$79.95
THE COLONELS BEQUEST	\$59.95
THE HOUND OF SHADOW	\$49.95
THE MUNSTERS	\$49.95
THEIR FINEST HOUR - Battle of Britain	\$59.95
THEME PARK MYSTERY	\$59.95
THRILL OF WINNING VOL II	\$59.95
THE STATE OF THE S	400.00

☆ SPECIALS BOX ☆ AMIGA VIDEO ADD ON PACKS 9INCLUDES GENLOCK, S/WARE, VIDEO)

THUNDERSTRIKES	\$59.95
TIE BREAK	\$59.95
TIME	\$69.95
TIME MACHINE	\$59.95
TORVAK WARRIOR	\$69.95
TOTAL ECLIPSE	\$49.95
TRACKSUIT MANAGER - SOCCER	\$39.95
TURBO OUTRUN	\$49.95
TV SPORTS FOOTBALL	\$69.95
TOM AND THE GHOST	\$69.95
TOURNAMENT GOLF	\$59.95
TWYLYTE	\$16.95
TURRICAN II	\$69.95
ULTIMA V	\$79.95
U.M.S VIETNAM	\$29.95
ULTIMA IV	\$79.95
UNREAL - GREAT GRAPHICS	\$59.95
VAXINE	\$59.95
VENUS FLYTRAP	\$59.95
VOYAGER	\$59.95
WAR GAME CONSTRUCTION SET	\$49.95
WARLOCK - THE AVENGER	\$59.95
WHITE DEATH STRATEGY	\$79.95
WICKED	\$59.95
WINGS OF DEATH	\$49.95
WINNERS ITALY 1990 SOCCER	\$49.95
* WINGS CINEMAWARE	\$89.95
WINGS OF FURY	\$69.95
* WOLF PACK - WAITING TREV'S VERDICT	\$79.95
WORLD CHAMP SOCCER	\$69.95
WORLD CUP COMP	\$69.95
WORLD TOUR GOLF	\$45.95
WRATH OF THE DEMON	\$89.95
XENOMORPH	\$59.95
XYBOTS	\$45.95
YOGI'S GREAT ESCAPE	\$39.95

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	***************************************
ZAK MC KRACKEN ZANY GOLF - NEAT GAME	\$52.95 \$49.95
ZOMBIES	\$59.95
PRODUCTIVIT	ΓY
3-D PROFESSIONAL (WITH VIDEO)	\$350.00

	PRODUCTIVIT	Y
	3-D PROFESSIONAL (WITH VIDEO)	\$350.00
	A TALK 3 - SPECIAL	\$69.95
	ALL IN ONE - BY GOLD DISK - NEW	\$99.95
	A-MAX - SPECIAL III	\$149.95
	AMIGA POST CODE AMIGA VISION - SPECIAL	\$49.95 \$150.00
8	AMOS	\$125.00
	ART DEPT PROFESSIONAL	\$\$349.00
	ART PARTS - FOR DPAINT 3	\$49.95
	ASSEMPRO	\$149.00
	AUDIO ENGINEER S/WARE/H/WARE	\$CALL
	BROADCAST TITLER V2 PAL - the best! CROSS DOS - V4.0	\$450.00 \$64.95
	DELUXE MUSIC CONSTRUCTION SET	\$99.00
	DELUXE PAINT III	\$99.00
Š	DELUXE PHOTO LAB (POSTERS TOO)	\$99.00
	DELUXE PRINT II	\$99.95
	DELUXE VIDEO III	\$99.95
8	DESKTOP BUDGET - SPECIAL DIGIPAINT 3 *	\$49.95 \$135.00
	DIGIVIEW GOLD 4	\$269.00
	DIRECTOR V.2	\$189.00
8	DISTANT SUNS	\$99.95
8	DIRECTORY OPUS VER 2 - HOT	\$49.95
8	DRAW 2000 - SPECIAL	\$69.95
8	DYNACADD EASY LEDGERS (WITH JOB COSTING)	\$499.00
8	EASY LEDGERS ACCOUNTING	\$375.00
8	ECLIPS - PRO DRAW/PAGE CLIP ART	\$139.00
8	ELECTRIC THESAURUS	\$69.95
8	ELECTRONICS DEBTORS SYSTEM	\$299.00
8	FLASHBACK - HD BACKUP - NEW GOLDSPELL 2	\$79.95 \$44.95
8	G.P. TERM - TERMINAL PROGRAM	\$99.00
8	HAM IT UP - WORKS WITH DPAINT	\$69.95
8	HEADLINE FONTS 1	\$99.00
8	HEADLINE FONTS 2 HEADLINE FONTS SUB	\$99.00
8	HOME BUILDERS CAD	\$99.00 \$299.00
8	IMAGINE - HOT -NEW - RAYTRACING	\$399.00
8	INTROCAD	\$99.00
8	KARA ANIM FONTS	\$79.95
8	KINDWORDS	\$69.00
8	LATTICE C V5 MAC TO DOS	\$399.00 \$189.00
8	MODELLER 3D - SPECIAL	\$69.95
8	OUTLINE FONTS FOR PRO PAGE	\$269.00
8	PAGESTREAM FONTS VOL 1.1	\$59.95
8	PAGESTREAM V2.0	\$299.00
ĕ	PHOTON PAINT V2 - HAM PAINT PRINTMASTER ART GALLERY 1	\$199.00 \$49.95
8	PRO VIDEO FONTS (SET 2)	\$149.00
	PROFESSIONAL DRAW V2.0*	\$275.00
	PROFESSIONAL PAGE - SPECIAL	\$295.00
	PROF PAGE - STRUCTURED CLIPART	\$79.95
	PROFESSIONAL PAGE V 2 + VIDEO PROWRITE V3.0	\$450.00 \$199.00
	PROWRITE - GERMAN DICTIONARY	\$49.95
	PROWRITE - PROFONTS 1 (extra fonts)	\$49.95
	PROWRITE - PROFONTS 2 (extra fonts)	\$49.95
-	QUARTERBACK (HD BACKUP)	\$99.00
	QUARTERBACK TOOLS QUICKWRITE - WORD PRO - good one	\$99.00 \$99.95
-	SCENE GENERATOR	\$74.95
-	SEASONS & HOLIDAYS CLIP ART	\$49.95
-	SPRITZ PAINT PROG	\$99.95
-	SUPERBACK	\$99.95
-	SYSTEM 3 (ACCOUNTS)	\$129.00

8		
	THE ART DEPARTMENT	\$129.00
	THE DIRECTOR	\$99.00
×	THE OFFICE - GOLD DISK	\$399.00
	TV TEXT PROFESSIONAL	\$259.00
ě	ULTRA CARD PLUS	\$145.00
8	VIDEO TOOLS	\$299.00
	VIDI AMIGA F/GRABBER B/W LO-RES	\$399.00
	WALT DISNEY ANIMAT'N STUDIO - Hot	\$249.00
ю		

MUSIC

×	MUDIU		
8	BARS AND PIPES	\$199.00	
8	BARS AND PIPES EXTRA MODULES	\$CALL	
8	DELUXE MUSIC CONSTRUCTION SET	\$99.95	
8	DR T'S COPYIST APPRENTICE	\$149.00	
8	DR T'S COPYIST DTP	\$449.00	
8	DR T'S PHANTOM (SYMPTE SYNCH)	\$CALL	
8	DR T'S TIGER CUB	\$119.00	
8	FUTURE SOUND - (STEREO DIGITISR)	\$299.00	
8	HARMONI	\$149.95	
8	KAWAI FUN LAB KEYBOARD - \$100 off	\$895.00	
8	KEYBOARD EDITORS	\$CALL	
8	MASTER SOUND (MONO DIGITIZER)	\$89.95	
8	MIDI MAGIC	\$299.00	
8	MIDI INTERFACE	\$89.95	
8	MUSIC X - STILL THE BEST	\$299.00	
ĕ	MUSIC X JUNIOR	\$CALL	
8	PERFECT SOUND 3.0	\$199.00	
8	SONIX 2.0 - MUSIC	\$99.00	
8	SOUND EXPRESS - (STEREO DIGITR)	\$129.00	

BOOKS

AMIGA 3D GRAPHICS PROGRAMMING	\$49.95
AMIGA BASIC INSIDE & OUT	\$49.95
AMIGA C FOR BEGINNERS	\$49.95
AMIGA C FOR Advanced Programmers	\$69.95
AMIGA DESKTOP VIDEO GUIDE	\$49.95
AMIGA DISK DRIVES INSIDE & OUT	\$49.95
AMIGADOS INSIDE & OUT	\$49.95
AMIGADOS QUICK REF GUIDE	\$29.95
AMIGA FOR BEGINNERS	\$39.95
AMIGA GRAPHICS INSIDE & OUT	\$49.95
AMIGA HARDWARE MANUAL	\$49.95
AMIGA MACHINE LANGUAGE	\$49.95
AMIGA MORE TRICKS & TIPS	\$49.95
AMIGA PROGRAMMERS HANDBOOK	\$54.95
AMIGA ROM KERNEL LIBS & DEVICES	\$59.95
AMIGA ROM KERNEL REF MANUAL	\$59.95
AMIGA SYSTEM Programmers Guide	\$69.95
AMIGA TRICKS & TIPS	\$39.95
AMIGA BASIC ADVANCED	\$34.95
AMIGA BASIC MANUAL	\$29.95
SIERRA & OTHER HINT BOOKS	

G'DAYS

G'DAY TO MIKE BENNET & DAVID & ALL THE GUYS AT CHANNEL 9

HI TO BILL MINNETT AT CHANNEL 2 ON ANDREW DENTON'S "LIVE AND SWEATY"



DO NOT SEND CASH!!

HARDWARE & ACCESSORIES

ON DISPLAY, ALWAYS

SHOP 9 AKUNA LANE - P.O. BOX 879, MONA VALE 2103

\$1599.00 Star LC24-200 Colour 24 Pin Printer ' \$750.00 Amiga 500 Video Packs Amiga 500 Video Add On Packs Citizen CSX-140 Colour 24 Pin Printer* \$799.00 Amiga 500 Music Packs Amiga 500 Music Add On Packs Canon Bubble Jet Printer \$1299 00 \$799.00 = All printers come with Free printer cable. \$399.00 Amiga 500 Starter Kit with Intro VideoTutorial Amiga 3000's 100mb or 40mb \$Call \$850.00 \$1099.00 Amiga Deluxe Kit with Extra 18 Programs Amiga A590 Hard Drive Amiga A590 Hard Drive with 2MB Ram "Call About Larger Hard Drives" \$799.00 **NEWS 'N' STUFF** \$145.00 Amiga A501 Ram Expansion & Clock Amiga 2000 - Ratii Expansion & Clock Amiga 2000 - Special Price Amiga 2000 Pro Pack (Heaps of S/Ware) Amiga 2000HD Pro Pack (Heaps of S/Ware) \$165.00 \$1599.00 **Bars and Pipes** \$1699.00 Professional (Hot Stuff) \$Call Amiga 2091 + 40Mb Hard Drive (Expandable) \$1100.00 1950 Hi-Res Monitor (For A3000 & Ver2.0) Amiga 2000/22500/3000 Internal Genlock **SCall Phoenix Audio Digitizer** \$399.00 (a no frills sound card for \$50) Neriki Desktop Genlock VHS/SVHS \$1199.00 Vidtek Scanlock Genlock VHS/SVHS \$1699.00 Vidtek VideoMaster Genlock VHS/SVHS & Splitter Australian Amiga User Group A2000 AT Bridgeboard & 5 1/4" Drive A2000 XT Bridgeboard & 5 1/4" Drive \$875.00 Expo \$475.00 at Parramatta Town Hall on A500 XT Card With 512k, Clock & Dos 4.1 \$699.00 Ver 1.3 Rom Chips \$29.95 Saturday 1st June Super Agnus Chip Super Denise Chip \$59.95 East Coast Amiga Open Day \$39.95 Rom Chips - 68010 Keyboard Cover Skins for Amiga 2000 \$39.95 Sunday 9th June at Erina Keyboard Cover Skins for Amiga 500 \$29.95 Joystick Extension Cable THE HARD DISK CAFE DigiView/Printer Switch Box & Cable Stereo Monitor Switch Box \$69.95 \$29.95 POSTAL ADDRESS Harris Hitek Filter Screen (Reduces Flicker) \$39.95 P.O. BOX 879, MONA VALE 2103 Prism Colour Splitter & Extra Cable Canon ION Still Video Camera Kit \$499.00 PH: (02) 979 5833 FAX: (02) 979 6629 \$1250.00 Vidi Amiga Frame Grabber B/W B/W Video Camera (The Old Way!) \$399.00 **AUTHORISED EDUCATION** \$699.00 DEALER Sharp JX-100 Colour Scanner \$1495.00 Colourburst 24Bit System Kurta Graphics Tablet (S/Ware EXTRA) **SCall** \$899.00 PHONE FOR THE LATEST Kawai Funlab Keyboard & Midi I/Face Commodore 1230 9 Pin Printer B/W * \$895.00 **NEWS ON SPECIALS AND** \$325.00 Star NX-1000 Colour 9 Pin Printer * Citizen 200GX Colour 9 Pin Printer 8 **NEWEST PRICES ON** \$475.00 HARDWARE. PHONE:()_ NAME: PCODE ADDRESS: ✓ PAYMENT : CHEQUE □ B/CARD □ M/CARD □ CARD# Exp: D 🖨 🗀 Signature ALL ITEMS LISTED ARE IN STOCK AT TIME OF DEADLINE AND WILL BE SENT SAME DAY, ALLOW 14 DAYS DELIVERY, ADD \$3.00 SOFTWARE POSTAGE HARDWARE CALL FOR ARRANGEMENTS. ALL PRICES SUBJECT TO CHANGE. DESCRIPTION PRICE

TOTAL =

	EDUCATION				
ø	READING & TYPING	AGE 3-6	\$39.95		
	ALPHABET	PRESCHOOL	\$49.95		
8	ARITHMETIC	HIGH SCHOOL	\$69.95		
	ASSOCIATED - WORD ASSOCIATION	AGE 3-8	\$39.95		
	BAMBINOS JIGSAW PUZZLE	AGE 3-8	\$39.95		
	BASIC GRAMMER BETTER SPELLING	AGE 7 & UP 8 TO ADULT	\$49.95 \$59.95		
	CROSS OUT THE INTRUDER	AGE 3-8	\$39.95		
	DECIMAL DUNGEON	AGE 5 & UP	\$69.95		
	DINOSAUR DISCOVERY KIT		\$54.95		
	DISCOVER ALPHABET	AGE 6 & UP	\$39.95		
	DISCOVER CHEMISTRY	AGE 12 & UP	\$39.95		
	DISCOVER MATHS	AGE 10 & UP	\$39.95		
	DISCOVER NUMBERS DISCOVERY GEOGRAPHY expansion disk	AGE 6 & UP GRADE 9-12	\$39.95 \$29.95		
	DISCOVERY HISTORY EXPANSION DISK	GRADE 9-12	\$29.95		
	DISCOVERY MATHS MASTER DISK	GRADE 1-7	\$59.95		
8	DISCOVERY SCIENCE EXPANSION DISK	GRADE 9-12	\$29.95		
	DSICOVERY SOCIAL STUDIES EXPANSION	GRADE 9-12	\$29.95		
	DISCOVERY SPELL MASTER DISK DISCOVERY TRIVIA 1 EXPANSION DISK	GRADE 1-7	\$59.95		
		VARIOUS	\$29.95		
	DISCOVER TRIVIA 2 EXPANSION DISK	VARIOUS TEACHERS	\$29.95 \$89.95		
	EZ-GRADE (TEACHERS GRADEBOOK) FUN SCHOOL 2	AGE 6-8	\$49.95		
	FUN SCHOOL 2	OVER 8	\$49.95		
	FUN SCHOOL 2	UNDER 6	\$49.95		
	FUN SCHOOL 3 * NEW		\$49.95		
	KATIES FARM		\$59.95		
	KIDS COLLECTION	AGE 3-7	\$59.95		
	KIDS TALK	5 TO 12 PRESCHOOL-6	\$54.95		
	KINDERAMA MAGIC MATH	4 TO 8	\$69.95 \$49.95		
	MATCH IT	4100	ψ43.33		
	MATH A MAGICIAN		\$49.95		
	MATH BLASTER PLUS-PRINTS CERTIFICATES		\$69.95		
	MATH MANIA	8 TO 12	\$59.95		
	MATH TALK	1055.0	005.05		
	MATH WIZARD	AGE 5-10	\$69.95		
	MAVIS BEACON TEACHES TYPING MEDAL WINNER	AWARD WINNER	\$69.95 \$49.95		
	MEMORISE	AGE 3-8	\$39.95		
	PLANET PROBE	7102 0	\$49.95		
	PROBABILITY	HIGH SCHOOL	\$69.95		
	PUZZLE STORY BOOK	105 5 0 115	\$54.95		
	READ A RAMA	AGE 5 & UP	\$69.95		
	READ N RHYME ROBOT READERS - AESOPS FABLES		\$34.95		
	ROBOT READERS - THE LITTLE RED HEN	AGE 4-8	\$34.95		
	ROBOT READERS - THE THREE BEARS	AGE 4-8	\$34.95		
	ROBOT READERS - THE THREE LITTLE PIGS	AGE 4-8	\$34.95		
	ROBOT READERS - THE UGLY DUCKLING	AGE 4-8	\$34.95		
	SESAME STREET - LETTERS FOR YOU		\$49.95		
	SESAME STREET - NUMBERS COUNT SESAME STREET - OPPOSITES ATTRA	CT	\$49.95		
	SMOOTH TALKER	UI .	\$49.95 \$54.95		
	SPACE MATH	AGE 8 & UP	\$39.95		
	SPELL BOOK	AGE 4-6	\$39.95		
	SPELL BOOK	AGE 7 & UP	\$39.95		
	SPELLBOUND	PRIMARY	\$59.95		
	SPELLER BEE		640.05		
	SUM-IT MOUNTAIN SUNNYSIDE UP		\$49.95 \$49.95		
	TALES OF THE ARABIAN NIGHTS	AGE 8-12	\$69.95		
ø	TALKING COLOURING BOOK	PRE-SCHOOL	\$49.95		
	THE BIRDS & THE BEES - SEX EDUCATION	AGE 7-12	\$39.95		
	THINGS TO DO WITH NUMBERS	PRIMARY	\$39.95		
	THINGS TO DO WITH WORDS	PRIMARY	\$39.95		
	THREE BEARS	5 TO 10	\$49.95		
	TRACKERS QUEST	AGE 4 & UP	\$54.95		
ø	TRIGONOMETRY WHERE IN EUROPE IS CARMEN	HIGH SCHOOL VARIOUS	\$69.95 \$84.95		
	WHERE IN THE USA IS CARMEN	VARIOUS	\$84.95		
	THE ILL HE OWN TO ON THE		\$84.95		
	WHERE IN THE WORLD IS CARMEN	VARIOUS	DO4.33		
	WHERE IN THE WORLD IS CARMEN WHERE IN TIME IS CARMEN - Mystery	VARIOUS	\$79.95		

590 X=128:Y=128 592 S1=1+2*(RND(0)>.5):S2=1+2*(RND(0)>.5) 594 SN=INT(RND(0)*3) 600 X=X+5*S1:IF X<=24 THEN S1=1 610 IF X>=343 THEN S1=-1 620 Y=Y+10 * S2:IF Y<=50 THEN S2=1 630 IF Y>=229 THEN S2=-1 640 POKE V+16,2^SN+2^SN*(X<256) 650 POKE V+SN*2,X+256*(X>255) 660 POKE V+1+SN*2,Y 670 IF X>90 AND X<130 AND Y>90 AND Y<130 THEN RE-680 GOTO 600

Notes

1. Line 590 sets the starting coordinates.

2. The RND statements are used with great effect to decide how often a bounce will occur and, when one does, to randomly select which of the sprites 0-2 will move and in what direction.

3. S1 and S2 are the signs of the X and Y movement respectively, i.e. when S1 = 1, the X value will increase and when S1 is -1, the X value will decrease. At the boundary, the sign of the movement is simply reversed. Line 592 randomly sets these to either 1 or -1. The expression 2*(RND(0)>.5) is zero if RND(0) is less than 0.5, otherwise it equals -2.

4. The full range of X is used, Lines 640 and 650.

5. Line 670 returns to the main program if the bouncing sprite is roughly near the other two.

HARD DRIVE SALE

All combinations are high performance Series II with space for 8 Mb RAM

IMPACT 2000 / 40Mb Quantum \$1090 IMPACT 2000 / 52Mb Quantum \$1190 IMPACT 2000 / 105Mb Quantum \$1390

IMPACT 500 / 42MB Fujitsu \$999 IMPACT 500 /52Mb Quantum \$1250 IMPACT 500 /105Mb Quantum \$1690

WE BUY & SELL USED AMIGAS & PERIPHERALS WITH WARRANTY

ECS Motherboard upgrade A500 \$180 5112K RAM/Clock/Calender \$89

Sigmacom

48 Jaffa Rd DURAL NSW 2158 Tel (02) 651 3667 (018) 25 7471

KEEP UP TO DATE OMPUTERMATE

Get your favourite magazines (air freighted), hot off the press each issue, by ordering now and paying in advance for 1 years' issues.

Not only do you save, you're also first with all the overseas news.

The property was a supply and the su	PARTIE OF THE
MAGAZINES	YEAR
ACE. All formats (UK) 12 issues	\$126.00
AC'S TECH. Amiga. Inc Disk (US) 4 issues	\$ 96.00
AMAZING COMPUTING, Amiga (US) 12 issues	\$114.00
AMAZING COMPUTING PRODUCT GUIDE.	
Amiga (US) 4 issues	\$ 74.00
AMIGA ACTION. (UK) 12 issues	\$120.00
AMIGA ANIMATION (US) Inc. Disk (was AX)	
6 issues	\$174.00
AMIGA COMPUTING. Inc Disk (UK) 12 issues	\$120.00
AMIGA FORMAT. Inc Disk (UK) 12 issues	\$174.00
AMIGA POWER (UK) 12 issues	\$138.00
AMIGA USER INTERNATIONAL (UK) 12 issues	\$150.00
AMIGA WORLD. (US) 12 issues	\$150.00
COMMODORE FORMAT. C-64/128 (UK)	
12 issues	\$150.00
COMPUTE! All formats (US) 12 issues	\$126.00
C.U. AMIGA. Inc. Disk (UK) 12 issues	\$174.00
INFO. Amiga (US) 12 issues	\$150.00
PC HOME JOURNAL. MS-DOS (US) 6 issues	\$ 69.00
PC LEISURE. MS-DOS Inc. Disk (UK) 6 issues	\$ 69.00
PC TODAY. MS-DOS Inc. Disk (UK) 12 issues	\$150.00
RAZE. All formats (UK) (was Games Machine)	
12 issues	\$138.00
ST ACTION. Inc Disk (UK) 12 issues	\$174.00
ST FORMAT. Inc Disk (UK) 12 issues	\$174.00
THE ONE. All formats (UK) 12 issues	\$162.00
ZERO. All formats (UK) 12 issues	\$174.00
ZZAP 64! Amiga and Commodore (UK)	
12 issues	\$138.00
Get your magazines hot off the p	ress

each month!

□ Cheque		
Credit Card No:	Exp. Date	1
Name		

You can also order by phone. Just call 02 457 8388 and give your name, address and credit card number.

OMPUTERMATE producty (australia) ptp. ltd.

P.O. Box C64, Mt. Kuring-Gai, N.S.W. 2080



by Andrew Leniart

The number of letters asking for help that have been flooding in to my post office box is pleasing to say the least. So much so that I have decided to take a break from discussing commands this issue and come good with the promise I made in the last issue of

This month, the column will be devoted to answering your queries and trying to solve some of the problems that you are having. If you find that you have missed out this time, please be patient. All letters will be covered at some stage eventually.

Shell window

Our first problem comes from Steven McKinlay at Doncaster VIC whowrites:

Dear Andrew, Your past CLI tutorials have been extremely helpful so I wonder if you can help me with this small problem. On one of my disks I like to load (or actually leave) a CLI window open on the bottom of the screen after booting up with that disk. So, in the startup - sequence, instead of having endcli at the end of it, I just shrink the window down to a smaller size and display some text in it saying something about the disk or some reminder notes I had put in the startup-sequence last time. In this way the CLI is conveniently ready to use straight away or whenever I need it.

That's not the problem though. What I really want there is a Shellwindow (instead of a CLI) and all the text from the startup-sequence to be displayed in this shell window. Is it possible to do that from the startup-sequence and if so, how?

REPLY: Well Steven, first of all, you neglected to mention whether or not you were using the 1.3 version of Workbench or whether you are still using the old 1.2 version. If the latter is the case, then you can't have a Shell instead of a Cli as the 1.2 version of AmigaDOS does not support shells.

to get a Shell instead of a Cli, then instead of issuing the command NewCli - simply make the entry NewShell and you will have it.

In regards to having the text from your startup-sequence appear in this window, then yes, it is possible, but why do you wish to do it that way? Try this out for size - Make a blank space somewhere before the end of your startup-sequence and enter the following commands / lines:

Dir Ram:

Copy Df0:s/startup-sequence Ram:

What this will do is actually create a file in RAM: by the name of "startup-sequence" which you will then be able to view at leisure whenever you choose by using one of the many text readers avail in the Public Domain or via the "more" text viewing utility. A lot neater way of achieving the same result and saving yourself the hassle of a cluttered CLI window at the bottom of the screen. Try it, you'll like it.

Corrupt disks

Our next problem comes from Andrew Gormly of Walkerville, SA who writes:

Dear Andrew, When I first bought my Amiga 500 in 1987, a short timelater nearly all of my store disks came down with the "Disk structureCorrupt" syndrome. Six weeks and \$50.00 worth of of CLI books later I managed to suppress the problem and clean all my disks. I have never seen it happen since (except for when I accidently took my Bards Tale disk out too soon!) I do not know if anyone else has had anything like this, but it spread exactly like a virus does - infecting writeenabled disks when placed in the drive after a warm boot. What was it? How did it happen? And will it come again?

REPLY: The problem you describe sounds suspiciously as though a virus was infecting your disks at the time. Even if you had been checking your disks regularly with a virus checker, the one you were using may not have been able to find it. The rea-If you do use the 1.3 Version, then son you managed to stumble across

PART 11

a fix to the problem could be that by going through all your disks you somehow managed to eliminate the culprit from your disks.

It has happened to others, indeed, it's happened once to me so don't feel as though you are the only one. Whether or not it will happen again depends on how stringent you are with new software that you get.

I find that a good rule to follow is to assume any new piece of software is virus-ridden until proven otherwise. Get yourself a good virus checking program like ZeroVirus by Johnathan Potter or NoVirus by Nic Wilson and check each new disk you get before trusting that it is clean.

Don't forget to check for both file (link type Viri) as well as boot block culprits as both are unfortunately

plentiful.

Script files

Moving onto the subject of Script files, Harry Kloppenburg of Thornlie in WA had this to say:

Dear Andrew, Many thanks for your informative articles on the CLI.

There are indeed many glitches, limitations and possibilities in CLI commands that are not directly obvious or explained enough. My particular problem has been with the nesting of commands in a scriptfile.

Is progressive indentation in a script file necessary or just a case of neat programming? I found some examples of nested programming in Abacus books hard to follow (using IF/ ELSE/ENDIF or similar commands). One or preferably a few examples of this will be greatly appreciated. Thank you kindly for your efforts.

REPLY: Ok, for the benefit of those that may be a little in the dark on the subject of script files, let's start at the beginning. What is a Scriptfile?

A script file (sometimes referred to as a batch file) is a text file that can be written or created with any text editor like ED on your workbench or even NotePad.

Their purpose is usually to make life easier for you when working in the Cli by enabling you to execute several commands one after the other simply be executing the one script

There are a couple of rules which must be followed when writing a script file which might be worth mentioning here.

Continued on p 50

SPECIAL THIS MONTH

CHEAP DISKS!!! 3.5" DSDD IN BOX OF 10 \$8-00 PER BOX

POWERCOPY -THE POWER TO COPY ALL THE ULTIMATE BACKUP UTILITY \$30 **POWERDEVICE-HARDWARE TO UNLEASH THE** FULL POWER OF POWERCOPY \$60 **BOTH TOGETHER** \$80

IF YOU THINK YOU HAVE FOUND THE BEST DEAL - LET US BEAT IT!

PCM520 2.0 Mb A500 RAM exp. with 0.5 Mb \$160 PCM501 0.5 Mb A500 RAM exp. with 0.5 Mb \$79 A590 20 Mb Hard Drive with 2Mb RAM \$750 GVP Impact 500 series II 40Mb Hard Drive !!! \$980

Amiga Computers, Monitors, Printers, Hard drives, Accelerators, Memory expansions, Repairs, Modifications, Disk drives, Diskettes, Full GVP range - CALL NOW FOR THE BEST DEAL

PCM COMPUTERS - FOR ALL YOUR AMIGA NEEDS

1/1421 High St Malvern VIC 3144 PO BOX 70 Noble Park VIC 3174

Phone (03) 822 5873 or 018 322 920 Phone (03) 701 0343

FAX (03) 701 0077

OTHER PCM OUTLETS

Standard Computers J&S Computers Northwest Electronics 105 Mitchell St Bendigo VIC 3550 PO Box 198 Mentone VIC 3194 5/11 McDougall Rd Sunbury VIC 3429

Phone (054) 416 157 Phone (03) 580 6983 Phone (03) 744 4440

9 am - 9 pm

Amiga A500 Starter Kit / 1 Megabyte RAM	920-00	Epson LX-400 80 Column 9 Pin 180 CPS Printer	300-00
Amiga A2000	1540-00	Epson LQ-400 80 Column 24 Pin 180 CPS Printer	475-00
Amiga A2000 Pro Pack	1640-00	Epson LQ-550 80 Column 24 Pin 180 CPS Printer	580-00
		Citizen 200GX 9 Pin Color Printer	440-00
1084S Stereo Color Monitor	460-00	Citizen GSX-140 24 Pin Color Printer	680-00
Tystar 14" Multisync Monitor	720-00		
		A500 0.5 Mb RAM Exp / switch / clock	79-00
3.5" External Disk Drive	165-00	A500 2.0 Mb RAM Exp / switch / clock / 0.5 Mb	160-00
5.25" External Disk Drive	200-00	A500 2.0 Mb RAM Exp / switch / clock / 2.0 Mb	299-00
AEOO COMP Hand Daine with O Mt DAM	750-00	A500 4.0 Mb RAM Exp / switch / clock / 20 Mb	380-00
A590 20Mb Hard Drive with 2 Mb RAM	980-00	A500 4.0 Mb RAM Exp / switch / clock / 4.0 Mb	540-00
40 Meg GVP A500 Series II +8	1200-00	On earle, at measurement and P. C. E. F.	
50 Meg GVP A500 Series II +8 100 Meg GVP A500 Series II +8	1650-00	A2000 8 Mb RAM expansion with 0 Mb	370-00
50 Meg GVP A2000 Series II HC+8	1150-00	A2000 8 Mb RAM expansion with 2 Mb	500-00
80 Meg GVP A2000 Series II HC+8	1230-00		
100 Meg GVP A2000 Series II HC+8	1350-00	SIMM Modules for GVP range 2Mb	180-00
Full GVP Range incl. Accelerators		Audio Engineer Software	145-00
Boot Drive, Memory, ROM, NTSC/PAL etc.	mode	Audio Engineer Software + Digitiser	350-00
All Amiga Repairs	mous	Genius Mouse (with microswitches)	40-00



Firstly, the written file MUST be saved in straight ASCII format. Mosttext editors like Ed or Notepad will do this automatically. If you use a word processor to write your script files, then you need to make sure that it has the capability to save the file in Ascii format. Wordprocessors can often put in weird little control codes in files not normally visible to you which cause havoc when AmigaDOS goes to lines above being displayed in the Cli endif read the file.

Another important rule which 'must' be followed is that an Amiga-DOS script file may only contain AmigaDOS commands and routines and nothing else. The reason for this will become apparent shortly. An exception to this rule exists if you have some other (third party) commands Domain libraries or from some magazine coverdisks or wherever.

What a script file looks like

A very simple script file could look if warn like this:

Echo "Script file just executed" Echo "Wasn't that fun?" Echo "End of Script File"

That's it! If you were to type this useless three liner into your favourite text editor and save the file with a name like "Example" then you would if warn be able to execute it in a Shell or Cli. newcli "con:0/0/200/50/Newcli" Type "Execute Example" in a Cli or else Shell and the result will be the three endcli >nil: window the script was executed from.

In reply to your question on whether or not command indentation Ask "Load WorkBench? (Y-Yes N-No)" is necessary in script files, then the simple answer is no. It depends onyour personal taste. Some people like LoadWb to indent their script files as it makes them easier to follow, for THEM. Others, like yourself, feel differently. Look which you have obtained in the Public at the following two examples of a Endif simple startup-sequence. One is writ- Ask "Open a small Cli well? (Y-yes Nten without indentation, the other No)" with. But both would work equally well:

> Example 1 ask "Load WorkBench? (Y-Yes N-No)" echo "Loading Workbench"loadwb

else echo "Ok, CLI session then.." auit endif ask "Open a small CLI as well? (Y-yes N-No)"

Example 2

If warn

Echo "Loading Workbench"

Else

Echo "Ok, Cli session then.." Quit

If warn

NewCli "con:0/0/200/50/Newcli"

Else EndCli >Nil: endif

Finally, as you can see from the

Continued on p52

Amiga Annual 1991

Produced by the editorial staff of Australian Commodore and Amiga Review and Professional Amiga User

ESSENTIAL READING

☆ Complete up to date list of software available in Australia with description, price, availability, etc

☆ User Group List ☆ Fish Disk List ☆ Graphics ☆ Word processing

☆ Databases ☆ Hard Drives

☆ Communications ☆ Music

☆ Desktop Video ☆ Multimedia And lots more!

On sale at newsagents and computer dealers NOW only \$6.95

Or from us for \$6.95 plus \$1 postage. Send cheque, money order or Bankcard number to Gareth Powell Publishing 21 Darley Road Randwick 2031 - Phone 02398 5111



Microtechnologies Pty Ltd **Educational Reseller**

All Models

Screen Flicker Filter \$20.00 Deluxe - Paint III, Video III, PhotoLab \$99.95

A1000

8Meg Memory Expansion 2Meg \$499.00 Add per 2Meg RAM \$200.00

A2000 - Accelerator Special

A2630 Accelerator Card 68030/68881 25Mhz with 2Meg 32 bit RAM \$1299.00

* Phoenix Board - A1000 Replacement Motherboard

- Includes 1Meg Agnus, 2Meg on Motherboard A2000 Expan. & Video Slot, 68881 Socket K/Start & Drive Switches, SCSI Cont. \$945.00 K/Start & Drive Switches, SCSI Cont.

- 1" High 52Meg Quantum H/Drive Kit \$699.00 Inc. Brackets, Data, LED & Power Cables

Call Canon BubbleJet Printers - with Amiga Drivers Professional Systems & Professional Support

Visa/Mastercard/Bankcard Call or Fax your order or inquiries Mon-Fri 9 am - 6 pm Sat 10 am - 1 pm

Phoenix Microtechnologies Pty Ltd

Sth. Australia 5035 18 Hampton Road, Keswick, Fax (08) 293 8814 Phone (08) 293 8752



The Australian Amiga User Association Inc.

in Association with Commodore-Amiga Computers

PROUDLY PRESENTS

AmiForum'91'

The Second Annual Amiga Computer Expo Saturday 1st. June 1991

Parramatta Town Hall 10am. to 5pm.

Lots of Prizes to be won!



Admission: \$5.00, Children under 16 FREE if accompanied by an Adult
The Australian Amiga User Association Inc. brings you AmiForum 91. At AmiForum you will find:
See the Fantastically Fantabulous 24 bit color Colorbust for the Amiga 16.8 million colors
State of the Art Demos on Graphics, Animation, Multimedia, DTP and Business Software.

Bargains on the Hottest Amiga Software and Hardware from the Major Amiga Suppliers under one roof
See all the latest Hardware and Software for the Amiga all on show,
Demos From Commodore of the NEW Amiga 3000 and other new Hardware

AmiOz BBS (A SkyPix Graphic BBS) 02 6274442

Australian Amiga User association Inc.	I authorise The Australian Amiga User Association Inc. to debit
Membership Application Form	my□ Bankcard □ Mastercard account for the amount of \$ 3 5 . 0
	My card number is
Name:	00000000000000
	Signature:
Address:	Expiry Date:
	I understand I should receve my Australian Amiga User
Suburb Post Code:	Association Inc. Membership package within 4 weeks
	Signature:
Ph. No:Male:Female:	Date:
	Send to:
Age:Occupation:	The Australian Amiga User Association Inc.
Membership joining Fee \$35.00	P.O. Box 389 Penrith 2750 N.S.W Australia



above, nor does not matter if the commands or text contained within a script file are written in CAPITALS or lower case. Look through previous issues of ACAR for more examples on script files and how to take the best advantage of them. In any case, I liked your letter so a PD disk is on its way for your input.

Redirection

NSW where Michael Davis writes:

Dear Andrew, thank you for your great tutorial on the CLI. It is past the time when this should have been attempted. I have had an Amiga 500 for two years now, and using the magnificent Commodore instruction book I have been totally confused. [AL: Wasn't that RAD icon not appearing automatically the purpose of the book in the first after boot up is almost surely being the purpose of the book in the first

I am having a problem with two commands, first the redirection. When I en-

"Type > prt: opt a" the Amiga responds with

"Error - Unable to open the redirection file"

I ask it why and it tells me that the last command did not set a return code.

The other problem is the "Copy * to prt:" The Amiga says "Can't open prt: object in use" so again I ask Why and get the did not set a returncode routine. I have tried both Workbench 1.3 and Workbench 1.3.2 with ARP installed, with the copy command, I used "Copy to par:" and this seemed to work ok.

REPLY: I've never struck this problem before and had no luck in trying to reproduce it on my Amiga 500. However the error you are getting in your first problem indicates that the Amiga is having problems locating the printer and the fact that Copy * to par: works ok indicates that the machine is using the Par: device to use the printer rather

than Prt:

Try going into Preferences and changing the Par/Serial setting from one to the other and see if that helps. If it doesn't then perhaps some other readers have experienced the same problem and may be able to offer some help!?

Fat Agnus

Wally Kerr of West Geelong in Victoria writes:

Dear Andrew, Thank you for you great article CLI Tutorial in ACAR - it has been a great help to me and there must be thousand of others. I am using an Amiga 500 with a 512k expansion with workbench 1.3V.

In your last article in ACAR part 8 about mounting RAD after following your steps I could not after rebooting get a RAD icon. The only way I could bring up

an icon upon boot up was to either copy something to RAD first or DIR RAD in the Shell after which an icon would turn up called RAMBO and not RAD.

Is this normal or am I a novice with the Amiga doing something wrong?

the new Fat Agnus Chip? I have been told it is in the new Amiga 500 but you must have a modification done inside the PD diagnostic programs do exist, AMIGA. What does this chip do and is it though I've never used one myself so worth having this modification done?

And can you recommend any PD or Next problem comes via Penrith in commercial programs for checking the operation of the Amiga. I sometimes have program crashes and Guru's coming up on screen. I have used a memory diagnostic program and have no memory problems. Will a disk drive with dirty heads cause the Amiga to guru?

REPLY: Hi Wally. The problem of a caused by the fact that your machine is fitted with a 1.2 version kickstart Rom. (Read only memory chip). That's what gives you the insert workbench hand prompt when you first power up your machine. You could take your machine to your local Comcare centre and have the 1.3 Rom fitted to your machine, but a cheaper and easier solution is this:

In your startup-sequence somewhere after you have "mounted rad", simply put in another line with "Dir Rad:" and the problem will be fixed. You can then rename the Rad disk to whatever you like by inserting another line underneath that one which contains "Rename Rad: <Newname>".

If you opt to go for the upgrade chip, then you could have the new Fat Agnus

chip fitted at the same time.

The difference between the newer Fat Agnus chip and the one you have in your machine at the moment is actually quite dramatic. The Agnus chip in your machine at the moment can address 512K of Chip Ram. Chip ram is needed for any graphic capabilities on the Amiga including the windows used for workbench etc. It is a totally different beast to fast memory (ram:) that you get when plugging in the A501 memory expansion for example so should not be confused.

Fat Agnus on the other hand has the capability of addressing 1 Megabyte of Chip Ram. With it, you have double the graphic capabilities on your machine than before, ie: You could have twice the amount of windows open on workbench than you could before and not run out of Chip Ram. A highly useful and needed feature if you plan to do a fair bit of Paint, digitising or similar.

While it is possible to buy a Fat Agnus chip and fit it yourself, a few modifi-cations are needed to be made to your machine so it is highly desirable to have the chip fitted by a qualified computer technician.

As for your last query, yes, it is possible for a disk drive with dirty heads to be the cause of a guru but unlikely if you are not getting read write errors from your disks normally. Rather, I would be looking towards the applica-Also can you tell me and others about tion I was running at the time of the crash as it would more likely be the cause.

can't recommend one for you as you asked. The place to look for one would be in a good PD catalogue that lists the various Fish disks and others. There are a few excellent PD distributors around that have a catalogue you could get hold of and check out. Two come straight to mind and those are Prime Artifax and Megadisc both advertised in each issue of AC&AR.

Printing your artwork

Steven Williams of Gosnells in Perth WA writes:

Dear Andrew, My question concerns computer art, as I have purchased Deluxe Paint III and seen the results that can be obtained, is there a way to have good quality prints made? It seems that no dot matrix can achieve this as mentioned in an article by Alan Kirk in your magazine about the Epson LQ860 printer. Then how do you get what you want without purchasing an Inkjet printer, which is way beyond my financial means and most everyone else's. Is to get your work of art as you see it on screen, to paper, an impossible situation?

REPLY: Your problem of getting good quality printouts without it costing too much can be solved by finding a firm or third party which will do it for you. Look for ads in magazines as there are often people advertising a service such as this. A few are Desktop Utilities in Canberra, Megadisc and Prime Artifax.

Alternatively, if you have a modem or know a friend that has one, try posting a couple of messages in echo areas on the bulletin boards asking if anyone would be willing to print your works of art for a reasonable fee. Tried your local user Amiga user group to see if they have access to a printer that will do what you need? Use a bit of imagination and pretty soon you will have contacts all over the place.

Well, that's about it for this month. I think I've just about covered the majority of queries readers have had. While I don't have the time these days work with applications such as Deluxe to enter into personal correspondence with readers, I will continue to answer as many letters as I can through these pages spread over future issues so please keep them coming.

Till the next time, keep hammering that keyboard.



Detachable Keyboard

In the news this month is word of a detachable keyboard for the C64. I haven't heard a great deal about it as yet, except that it has a six foot long cable between the keyboard and the C64 to allow the most comfortable position for typing. I hope the keys are set out like those of a standard keyboard!

The people to contact are: SER, PO Box 85382, Racine, WI 53408, USA

The cost is \$US45 +\$3 shipping and handling. No sign of them in Australia - is someone reading this?

Reach your potential

This month I thought we'd take a look at using the C64 to its full potential. Sure, everyone knows about using it for word processing and playing the odd game but that's not all that the 64's good for. Read on and learn how versatile your 64 really can be.

EDUCATION: We've all seen those cute little programs for junior that show flashing numbers, bouncing turtles, and animated bears that have somehow been given the power of rational thought. Great, but how about us big kids? There's a noticable shortage of educational software for the over 10's, so it's up to us to write our own.

Next time you're studying for the HSC, a diploma, or

about possible exam questions, or questions that you know you would have difficulty in answering. Write yourself a simple database program with the questions and answers in DATA statements. Have the 64 ask the questions and then request an answer in a simple INPUT command. The 64 can keep repeating the ones you get wrong until you get each question correct every time. This is based on the method of 'Socrates', where simple questions are repeated over and over again until any weaknesses are ironed out through repetition of the questions and answers. Simple, but very effective.

CATALOGING: You may have catalogued all of your disks so that you know what files are where, but what about everything else? Use your 64 to catalogue your

CDs, videos, or bottle top collection.

Even more productive is using your 64 to catalogue magazines. I get just about every C64 and Amiga magazine I can lay my hands on and, as you could imagine, that adds up to quite a few mags. The only trouble is that when I'm looking for a particular article I can spend a complete weekend searching. My solution was to put together a little program that catalogues my magazines quickly and simply. When I need to look for an article I just type the subject name, such as 'music' and it will give me a complete list of magazine references. I could even be more specific. For instance if I'm looking for a particular programming article that I know was written by Mark Jordan I can choose to type in his name as well to give a more specific list.

Game cheats are also great for this. Catalogue your game pokes etc. When you're finding you're having trouble with Batman, for instance, type 'BATMAN' and have your program give a list of magazine references for pokes.

PERSONAL INFO: Keep a diary? How about computerising it? Using a simple word processor, or even your own software, you could keep track of what you did, when, and where. In years to come, when friends have boxes full of large, bulky, paper-based diaries, trying to work out what to do with them all, you can pull out your two or just coming to grips with learning to program, write down some questions that are related to your subject. Think what you were doing way back in 1991. And if you can

Continued on p56

CLASSIFIED ADVERTISEMENTS

WANTED TO BUY

Train Dispatcher, Super Dispatcher, Super Track Builder, Locomotive Switcher, Northeast Corridor for the C64, disk. Phone 042 29 7556.

FOR SALE

CanDo! \$89; thirty original Amiga games for \$500 or \$25 each or swap A590 HD Phone 519 4355.

Drawing Easyl, Anakin A500 great for artista and animators using ordinary pen or pencils. Works with D/Paint etc. Perfect condition. \$425. Phone John Seamons on 054 681013.

Games! - TMNT-\$35, It came from the Desert-\$40, Unreal-\$35, Pictionary-\$30. Phone Lawrence Green on 02 524 9549.

T.M.N.T. - New arcade sensation. Unwanted disks, willing to sell for \$45. Phone Peter on 042 849 754.

AMIGA PUBLIC DOMAIN SOFTWARE

Over 1700 disks to choose from

No subscription fees

No joining fees

No postage charges

Disks \$3 - \$4 - \$5 each

Send \$3 for catalogue disk

AMIGA PUBLIC DOMAIN CENTRE

PO Box 435, St Agnes SA 5097 Phone (08) 396 2163

"Software you CAN afford"

Theme Disks

Anti-Virus PAK	\$14.95
Protect and Eradicate ARP 1.3	\$5.95
Faster CLI, more disk space	
Atari Emulator Runs some applications, plus utils	\$5.50
Business 1	\$8.95
Calc, Bankn, Badger, AmiGant, H Calc	PII and Loan
Business 2	\$8.95
Mempad, IRA, DisSecretary Calendarm and StockBroker	
CAD	\$8.95

Super Workbench 1MB SID, Dmouse more	\$8.95
Star Trek	\$8.95
AGAtron version. Very good.	
Super Workbench 512	\$8.95
Zippy, Dmouse more	
Text Editors	\$8.95
Wordprocessing	\$8.95
TextPLUS, AmigaFox, Calend	ar Label Print,
PrintStudio Lila, GwPrint and	Outliner.

Graphics and Animation

Ace #06	\$5.50
Ace #09	\$5.50
Ace #14	\$5.50
Ace #17	\$5.50
Ace #18	\$5.50
Ace #19	\$5.50
Ace #20	\$5.50
Artscape	\$8.95
Badge Demo Set - 3 Disks	\$12.50
Busy Bee	\$5.50
Batdance	\$5.50
Cameron Scanner	\$5.50
Crionics	\$5.50
CSIRO Sat-Piccies	\$5.50

HUGE 470+ FISH DISK LIBRARY FISH \$5.50 10 or more \$5.00 each See complete list of 200 - 400 in 1991 Amiga Annual

Compilation of the best CAD in PD Communications	\$8.95
JRCOMM, ARC, ZOO and useful tips	
Communications 2	\$8.95
VAXterm, Hyperdialer etc	40.00
C64 Emulator	\$5.50
Full-blown, more options.	Ψ0.00
DOS Utilities 2.0	\$14.95
All the best utils yet!	\$14.95
DTV Still Store	05.05
	\$5.95
Still frame playback.	00.05
DTV/Graphics	\$8.95
Abridge, Title Generator,	
sMOVIE, ImageLab and more.	
Education 1	\$5.50
Elements, SpaceLog, DrawMap etc.	225110031
Education 2	\$5.50
Gravity-well, Planets, Life-cycles, Orb	oit
Hacker 1	\$5.95
PowerPacker, Sound Scanner plus m	any more.
Mr Sandman	\$8.95
Digitised sound demo (2 disks).	110
MS-DOS theme disk.	\$5.50
Icon driven MS-DOS reader	
Sound Tracker Modules	\$5.50ea.
Four disks available.	+5.500u.

Our Service

Order Processing

Most orders are processed within 24 hours of receipt. You will not be charged if you're paying by credit card until the goods have been dispatched. Orders are sent by surface mail - however, we do have a range of courier services available if you need speedier delivery.

Support

If you have a more obscure problem, write down the error or problem and call for advice. It is best if you can also have the disk or program ready at your computer as this can help us help you quicker. Please use our Support number on (02) 879 7455.

What if it doesn't work?

If for some reason, the disk you buy is damaged just return it for a free replacement. Please include a short note explaining the problem which occurred and your correct return address, and day time phone number.

Cycle Ball Demo	\$5.50
Digi-Slide Show 1	\$5.50
Digi-Slide Show 2	\$5.50
Dragon's Lair Demo	\$5.50
Epic Demo	\$5.50
Gymnast	\$5.50
Kanakas	\$5.50
Luxo Teenager	\$5.50
Music Mania #10	\$5.50
Music Mania #12	\$5.50
Music Mania #12	\$5.50
Newtek Demo 1	\$8.95
Newtek Demo 2	
	\$8.95
Northstar Demos	\$8.95
PC87 Slide Show	\$5.50
RGB Hazzards	\$5.50
Soundtracker 5-Set	\$22.00
Space Ace Demo	\$5.50
Stamp Collector	\$5.50
Vaux Killer (1MB)	\$8.95
Walker 1 (1MB)	\$5.50
Walker 1 (2MB)	\$8.95
Walker 2 (2MB)	\$8.95
Walking Cat	\$5.50
Zues Demo	\$5.50
Eddo Domo	ψ0.00

FISH up to 470

How To Order

Prime Artifax P.O Box 288 Gladesville 2111



(008) 252 879 FREE CALI Orders Only. (02) 879 7455 Sydney Metro

· GALLERY 1·

The best new HAM ray-traced images. View from Workbench

How to Pay

- 1. Credit Card Visa, Mastercard or Bankcard.
- 2. Send a cheque or money order.
- 3. Cash on delivery. Collect from your post office and pay them (extra \$4.50 Australia Post charge.)

ORDER FORM	PRODUCTS
Address	
<i></i>	
Day Phone	
Card No.	
Exp Date	
Signature	

Prime Artifax Public Domain

FEATURE Game

Drip: A full blown arcade game that's very out of the ordinary. It's up to you, as the 'Drip', to rust your way up 15 floors and get the juices flowing again. Avoid running or dripping into the acid, plasma and icecubes shooting out of pipes. You can get a little help from party balloons and bubbles that float by. Drip requires 512k of memory.

Entertainment

BolngDemo: Despite the name, this is not a demo as such - it's one of those try before you buy versions of a commercial game, only this one is very playable. The Boing part is a salute to the original Amiga Boing Demo! In this level and ladders game, you travel about on poles, ladders, teleport points and at all costs which the Bongia Asign Ball.

avoid the Boncing Amiga Ball!

RollOn: The play is a little like Boulderdash or Emerald Mine.

Eight levels are included. To win you need to plan ahead and organise your moves carefully - sort of a joystick strategy. Includes level editor to design your own games.

a level cluster to design your own games.

SlotCars.: A complete working game of SlotCars...just one of four games in the commercial package known as: 4 IN ONE - EASY BUT FUN! The game concepts are simple but addictive. A combination of strategy and dexterity is needed to beat this

MoonBase: Adventure/Arcade - guide the shuttle ship to and from the mother ship with the valuable cargo. A multi-level lunar

Strategy

Turn: A strategy game - the aim of which is to produce a given pattern of stones on the board. In order to complicate the game a little bit, all stones around the selected stone will turn either from black to white or from white to black. There are 18 levels available. There's also a pattern editor to design your own

China Challenge: Similar to the well known game Shanghai or Mahjong, the target of China Challenge is, to remove all parts of the pile, the so called Dragon, step by step. This dragon is composed out of 120 different pieces. A challenging past time, fun for two players too!

MarbleSlide: You've got to be quick to get this one. This is the fullest extent to which we've ever seen the old magic square the-me taken - and one of the best. Slide the sliders to guide the marble home. But your time is VERY limited!

AmiGo: Strategy Board game for one, two or no players!

Workbench

SimGen: How would you like Saturn on your Workbench? SimGen makes your screen look like it is Genlocked. A number of example imagaes are included. Much better than DropCloth or any other of these Workbench background programs. Doesn't slow your Amiga down either!

Flip:This screen gag will drive you nuts. Try it out!

Rocket: Yet another in the great line of Workbench gags. This

line number releases a guided rocket which heads straight for

your mouse pointer. If you don't move in time, on impact the

whole lot explodes. Stick it on a friends Workbench for fun!

'Liner: Our serious program for the month. If you develop out-lines for speech, writing, essays or reports, this program will help you organise and edit your material in point form - the best way to develop an outline. A fast solid program.

WO: A short and quick utility, which helps you to bring order in your addresses and codes them and saves them (password-

encoded) on disk.

Graphics

MandAnim: If you enjoy madlebrots, you'll love MandAnim. WandAnin. If you enjoy manageros, you an acre wanter unuliple key areas of a mandlebrot. MandAnim will generate as many steps as you specify between each frame creating an expanded animation file which you can load and animate in Deluxe Paint III. Some impressive graphics can be achieved.

Hennon: You can create some fabulous looking images using this program which lets you explore Hennon mapping. The program produces patterns like the one below using the formula $x = x * \cos(a) - (y - x * x) * \sin(a)$ and $y = x * \sin(a) + (y - x * x) * \cos(a)$. Several exmaple images are included. Full 640 x 400 hisse is exported. hires is supported.

plus FREE \$5.50 Graphics or Animation disk of your choice with Amiga Live 6.

Amiga-Live Issue Six | Save on Back Issues!

Amiga Live #1 (2 disk set)	\$8.95
Amiga Live #2 (2 disk set)	\$11.95
Amiga Live #3 (3 disk set)	\$18.95
Amiga Live #4 (3 disk set)	\$18.95
Amiga Live #5 (3 disk set)	\$24.95

THEME DISKS!

Emulators and File Transfer

Transformer v1.22

Get into MS-DOS on the cheap. Much faster than the original Transformer. 68030 compatible. Requires MS-DOS on a 720K diskette. No documentation.

MS-DOS Theme Disk

Install a full MS-DOS device using a simple install icon. You can then read/write 720K IBM disks and format them too! MSH: acts like any other Amiga device. You can share the selected drive be-tween MS-DOS and AmigaDOS. Full documention and other useful utlities included.

Atari Emulator

Despite the German menu titles, it is possible to put this Atari emulator which runs in low, medium or hires to some use. Will run some applications and can be used to view Atari graphics. Assorted other utilities are included on the disk.

C64 Emulator

A very full-blown C64 emulator. Lots of utilities, more menu control and transfer options than previous commercial programs. If you like what you see you'll need to purchase the seriel interface direct from the U.S.A. - full details included with the disk.

NEW Educational

Chemistry

Chemesthetics allows you create a atomic model of different formaulae and visual chemical structures - a great teaching tool.

· SPECIAL OFFER · PD STARTER-KIT

OVER \$50 VALUE FOR JUST \$34.95

Super Workbench \$8.95

Ready to boot with lots of utilities. \$14.95

Anti-Virus Pak

Protects against infection and eradicates over 45 known strains!

Business 1

\$8.95

Star Trek

\$8.95

(AGAtron, full graphics version)

Newtek Demo II

ONLY 534.95

(7 Disks Full • Free postage)

For the Musically Minded!

Remix 1

Madonna and Blackbox sing out from your 1084S speakers in melodious mega remixes.

\$5.50

Tracks No. 5

To add to our large collection of Sountracker modules our latest addition including Bond, Fresh House and Wasteland will impress your eardrums.

\$5.50

New Animation and Graphics

Swartz Animation Set

A two disk set of some of the best cartoon-style animations on the Amiga ever seen.

\$8.95

Amy vs Walker Animation

Another Swartz animation to impress you friends.

\$5.50

Ray-Tracing Theme Disks

The best way to enter into the world of Ray-Tracing, DBK-Render allows you to create some amazing scenes.

\$5.50

program you could have your diary news, sport, and weather, electronic actually read back to you. And because it's on computer, you won't It's all there. Even some Australian have to worry about reading your own computer magazines have their arti-head. handwriting in years to come!

How about personal details? I'm sure we all worry about keeping bank account details, pin numbers, and tax file numbers written on paper in fear of them getting into the wrong hands. Keep them stored on computer. Most database programs have a password option if you want to be really secure, but because the details are paperless home users won't have to worry too

much anyway.

And time scheduling? Computers are great for this. Plan your time using any one of a number of programs. Appointment Manager, from one of the Suite 64 disk magazines, is great for this. Shame it hasn't got an alarm feature to remind you of where you should be and when! Paper-based time sheduling is messy because no matter how carefully you plan it out there will be changes, re-changes, and re-re-changes, which adds up to one very awkward appointment book. Be efficient. Use the 64!

CONTROLLING EXTERNAL

DEVICES: The 64 can control lights

in your house, model railway sets, radios, alarms, and just about anything else that uses a switch. I'll be honest and admit right here that I've never tried to myself, but I've seen many books on doing this using a 64, and even one or two working examples. The Beyond 2000 Science Awards some years back had one entrant using his 64 as weighing scales which gave a digital display on screen. Great ideas that the C64 is more than capable of.

BUDGETING: Not only can you see all your hard earned cash being spent on worthless items, but with a 64 you was fitted and things returned to norcan see it in FULL COLOUR WITH SOUND! Your 64 won't care about being subtle when it comes to reporting with using it all, you guessed it, the your financial affairs! Watch animated graphs slowly falling towards the zero line. That's the fun of computerised accounting and budgeting.

If you want to be boring, though, you might want to just keep track of cheque numbers, bank balances, and bankcard debts without the bells and whistles. It is more accurate, easier, and uses less paper (who said computer addicts don't care about the en-

vironment?)

what on-line services are available. wrote to Commodore and complained Box 288, Gladesville 2111.

banking, booking holidays, betting. cles on-line to read or down-load.

communications aid, so communicate with it! Make friends with other BBS users. Get a computerised pen-friend. Use it to meet other people with a the problem.

computer obsession.

things the C64 can be used for. There discovered. I'd even heard news about a person linking three C64s together to create a three manual organ. This than my Technics SX-E8L!). An out of the ordinary use that just goes to about them. show the versatility of the 64.

Letters

Since my article on the MCS 810/ 820 a few months back I've received word from numerous individuals who say that the situation is much worse than I thought. Here's a sample of the mail:

"...after about one month an unprinted line appeared on the paper. Being a good operator I read the instruction manual which said to clean the head, this did not, however, have any effect. So off to the service agents who tested the printer and informed me that the head had failed and I would have to buy one (\$90.00), as they only have a one week warranty!!!

"Needless to say I was not impressed so I wrote to Commodore who informed me they are a "consumable" (A \$90.00 consumable in a \$300.00 printer?). However, under the circumstances, they would provide me with a new one free of charge, this arrived,

"Just when I'm getting to grips printer head failed again, at nine

"I therefore called the Customer Service dept, in Sydney, and had a long talk with the supervisor, who agreed with me, that I had experienced more than my fair share of where X and Y are your coordinates. problems. It was arranged that Comor Star NX 1000CL.

'I'm sure that if every person who tions. HOME SHOPPING: Get to know is dissatisfied with his/her printer,

lay your hands on a copy of 'Hey, big Telecom's Discovery service is great perhaps something would be done mouth!' or another speech synthesis for a number of purposes. 24-hour about it."

Stephen L. Hack, Carindale, Brisbane

Don Dixon, of Port Willunga in SA, had similar problems with the print-

Obviously there is a major problem ON-LINE FRIENDS: A modem is a here. I strongly recommend any user that has experienced genuine problems to write to Commodore in Lane Cove, Sydney demanding a solution to

If you have had similar bad experi-The above short list is just a sam- ences with the MCS 810/820 then let ple of some of the more interesting me know of the details. The MCS models were reasonably big sellers so are thousands more just waiting to be I'll bet that there are more stories of problems. I'll keep you up to date with future developments.

In fairness I should say that I have was nine note polyphonic (that's more been the owner of two MCS printers and had only minimal complaints

I should also point out that the MCS 810/820s need special care because they are thermal. If you print too many pages in one session the head is likely to overheat, though there is supposed to be an in-built 'feature' that let the user know when there was a problem such as this. You must also be careful of the type of paper used in it. Rough paper is likely to wear out the printhead faster. Still, this is no excuse for some of the problems outlined above. Let's see what Commodore are prepared to do about this problem.

Tips and Tricks

Space doesn't permit a great deal in this section this month, so just a few quickies.

· Continuing with the theme of the MCS810/820, it has been pointed out to me that not all users realise that thermal fax paper will work with their printer. Many people find fax paper better because it's often cheaper and comes in a roll. I normally use 100 sheet packets of A4 thermal paper which cost around \$13 dollars. I find it's slightly better quality than

· The C64 mightn't have an elegant 'print@' feature, but you can still control cursor positioning. Just use POKE 211,X: PRINT: POKE 214,Y

· Hopefully I'll have space for more modore would take my MCS 820 as a tips and tricks next month. Rememtrade-in on either a Commodore 1230 ber that I'm always on the lookout for tips, tricks, questions and sugges-

Drop me a line care of: ACAR, PO

Screen shots from Pactronics

notice a great new look in pages. If all goes well, we view in ACAR soon too! will be running screen shots grabbed from most of our latest games with the fabulous Pactronics Action Replay II cartridge. While graphics some Amiga modes can't be grabbed effectively, with most the results are great.

As well as screen graphics, the cartridge lets you freeze games, examine memory for cheat codes and even modify programs for infinite lives. Handy gadget! For more information about the Action Replay cartridge phone Pactronics on 02 748 4700.

"Gods" from Mindscape UK

arcade-strategy game is alin the UK press. Watch out From this month, you'll for it from our local Mindscapers some time this the ACAR Entertainment month - and you'll see a re-

Sim-City scenarios

Dataflow have just re-leased two new scenario disks for Sim-City fans. You'll need a copy of Sim-City and at least 1 meg of grabbing RAM to run Ancient Cities or Future Cities - you'll be able to build your own towns in Ancient Asia, Medieval England and the Wild West with Ancient Cities, also Future Europe, Future USA and even a Moon Colony with the Future Cities disk. For more information phone Dataflow on 02 331 6153.

Hints disk

Don't forget you can or-This divinely titled new der an Amiga disk contain-

ing text files of all our hints ready getting rave reviews and tips from the last two years. It's packed with good ideas, but you'll need a standard Amiga wordprocessor to read them. To get your copy, send a blank disk, stamped, self addressed envelope and a cheque for \$5.00 (payable to Phil Campbell) to: Phil Campbell, PO Box 23, Maclean NSW 2463.

Hill Street Blues available at last

Good news for fans of TV's Hill Street Blues. A game based on the series is now available from Pactronics. Featuring a great intro Lemmings is now the most sequence, with scenes digitised from the show, Hill Street Blues looks like a very promising game.

AMOS club hits 1200 members

The AMOS club is a of March's ACAR.

great way to get into the art of AMOS programming. If you've got AMOS and you'd like to join the club make sure you send your registration form - you'll find it in the AMOS box. If you've lost your form, ring Neil Miller at Pactronics on 02 748 4700. When you join, you'll have access to a huge library of AMOS public domain programs, music and graphics - as well as plenty of advice, and a handy monthly newsletter.

Lemmings running hot

Mindscape report that popular computer game in the world! While they may be exaggerating a little, the game is racking up phenomenal sales, and it's incredibly popular. With good reason too! If you haven't ordered your free demo disk from Mindscape, do it now! See the coupon on the back



MINDSCAPE COMPETITION



This month's competition features SWIV - a cryptic acronym for SilkWorm IV. The game is the follow up to Silkworm, still remembered as the best Amiga shoot-'em-up ever. We're giving away five copies of the game shared between Amiga and C-64 entries. (Yep -this time C-64 gamers are in luck! There's a SWIV for you too.)

What do you have to do? It's easy. Simply make all the words you can from the letters SILKWORMIV. Each letter can only be used once. Put your entry in an envelope addressed to:

> Phil Campbell, SILKWORM Comp, PO Box 23 Maclean NSW 2463

Write your total on the back of the envelope, and post it before June 3rd. That's all there is to it!

Entertainment

To get your views print, write to: in print, write to: Phil Campbell, PO 23 452060. address for gaming letters only - anything else goes to the other end of the

Terry's Adventure and Tassie woes

Dear Phil, Would anyone out there in Amiga land have a cheat for Terry's Big Adventure?

Also, is there any way that competition deadline dates could be longer as I would have loved to have entered February's compethe end of February and we didn't get the magazine down here in Tassie till March 1st, so how could I enter? This happens quite regularly in Tassie, every so often I want to enter your competitions but we have either missed the deadline or only have 3 or 4 days to do the competition and get just isn't enough time! So please be kind and take pity on us Tassies who don't want to miss out - see what you can do for us!

Christine Jones Penguin Tasmania

Annual, but we're doing our

Maclean readers. Generally, we'll try NSW 2463, or fax to allow at least three weeks after the release date of each issue - though we need to member, that's the close in time for the winners to be notified in the following month's edition. We'll keep you posted on replies for TERRY'S BIG ADVENTURE.

Boulderdashing on the C-64

Dear Phil, My friends and I are newcomers to the C-64 and ACAR, and as there is not a lot on the C-64 we have read ACAR well. We are hooked on the game Boulderdash - our collection is "Series Games 1-4" and we have been able to work out the caves after lots of trial and error, except for cave N-zigzag on series 1. Any assistance would be aptition, but the deadline was preciated. We have tried many ways, and time - or the fireflies - always seems to beat us. We are able to let out 2-3 butterflies and turn them to diamonds, but time runs out.

Robyn Whiteman 23 Goddard Cres Quakers Hill NSW 2763

Ed: If you can help Robyn the letter posted, and that out of her tight spot, write to her direct, or drop us a line here at ACAR. There must be plenty of top Boulderdashers out there!

Pirates ahoy!

Dear Phil, I'm writing Ed: Sorry Chris! We've about your attitude to pibeen in a bit of a mess with rates. When you say things our competition deadlines like "Ooh! Look at that lately, magazines have been naughty pirate," they don't late because of the Amiga stop - they just laugh. You'll never stop school kids best to be fair to all our handing disks to each other

- but why can't they do everything! something about the big Reading people such as Australian Crackers United?

> Maverick, Croydon Park, NSW

Ed: Boy, no wonder you didn't put your real name on your letter. I don't say "Ooh, look at the naughty pirate!" I say things more like "Ooh, look at the way Cinemaware has just gone broke. Who will be next?" In other words, my main concern as we watch more and more software companies going down the gurgler, is how are we going to support them to the point where they can actually survive in the business? 'Cause if they can't, then there won't be any software left to swap in the playground!

Excellent mag

Dear Phil, This issue, March 1991, which I got just today is my second and I'm already impressed! I like the way your maga-zine is set out to cover all people's tastes. Well done on an excellent magazine.

I've enclosed a solution to Mark Peterson's problem with Rick Dangerous - but I've got a problem with the very next screen. I can leap onto the first ledge but when I try to leap to the second ledge the missile (or always gets me. help - I've tried Please help -

Reading David Bank's letter and the editor's reply about an Amiga disk with Amiga tips and hints, how about one for the C64 (I am a C128 owner, there has to be more than one!) for around \$5.00? If you can do it for the Amiga surely you can do it for the C64!

Adam Wade Ridleyton SA

PS. Could you please print this letter. I've written letters to other mags like Zzap, C+VG, CU, but with no success. I'd really appreciate it if you did print this

Ed: Let's start at the end and work back. We printed your letter. Congratulations!

Now, a quick reminder to all our readers that you can get a disk full of ACAR hints and tips by sending a blank Amiga disk and stamped, self addressed envelope with a cheque for \$5.00 to the address above.

C-64 users aren't so lucky - all our text files are in Amiga format, and converting to C-64 disks would be time consuming. There would have to be a BIG demand to make it worth the trouble. If you're interested, let us know so we can gauge the demand.

Thanks for your RICK solution. Hope someone does the same for you so you can get through your own sticky

Mindscape "Ultimate Ride" **Competition Winners**

Congratulations to these winners in the Mindscape Ultimate Ride Word Competition.

- First prize goes to: Peter Tate of Goonellabah NSW, with his huge tallyl of 1046 words. Well done! · Second Prize goes to Taffy Jones of Padbury WA,
- with 860 words. Third to Ron Kelly of Kerang Vic, with 767.
- Fourth to Mr M.N. Quan of Mt Pritchard NSW with 747.
- Fifth to G. Cook of Wulguru, Qld with 728. You'll all receive a copy of Mindscape's top class ULTIMATE RIDE for your trouble. And what of Chris Wootton, who usually storms home in our word competitions? A mere 347 words. What went wrong Chris?



AMIGA

Send your Amiga hints and tips to Phil Campbell, PO Box 23 Maclean NSW 2463, or fax them on 066 452060.

Xenon 2

Mark Porta, of North Balwyn (Vic) has completed Xenon 2, with a high score of 1,107,280 - which means he's very well qualified to offer a bit of advice. Here it is ...

1. If you have autofire, turn it on. In shop 1, don't sell your rear shot. To kill the fish, hit it in the eye.

2. In shop 2, sell the rear shot, buy the double shot and side shot. To kill the Crayfish, go up the side and get the back eyes first. Now go to the next side, and then the front.

3. Don't sell anything in shop 3 - buy a small life. To kill the spider, go up the back and wait for it to move, then fire at the fangs.

4. In shop 4, sell the side shot and buy the laser. Don't stay in the corner when you're attacking the crab.

5. Don't sell anything in shop 5 - buy a life. Stay in one spot as you attack the snake.

6. In shop 6, sell the rear shot and buy the side shot. Attack the dragon from the back.

7. In shop 7, sell the dome and buy the side shot. When attacking the face, first get the eyes - watch out, because they've got lasers.

8. Don't sell anything in shop 8 - buy homing mis-

siles. Hit the gold square to third spear. If you don't, try kill the tank. experimenting on the sec-

9. Don't sell or buy anything in shop 9 - go back and kill everything else before you attack the giant space ship.

Thanks for the top class tips, Mark! Hints like this are better than cheats, because the game will still be a challenge - if any other readers have mastered a game, how about sending in a similar "guided tour."

Rick Dangerous

Adam Johnston of Coal Point NSW sends this solution to Mark Peterson's problem with Rick Dangerous.

Mark wrote in the March issue saying "I can't get past the Egyptian level where you have to shoot the rock to make the stone fall down for you to climb on and get down to the next section where the spears come out of the wall. I've tried everything possible!" Not quite everything, but Adam agrees it's a tough problem.

"This is the most frustrating point in the game," says Adam, "and I discovered the solution more by luck than by skill." So here's what you do:

"You should have five men when you reach this point as you'll probably lose two or three until you perfect the timing.

"Once you have shot the wall and crawled down onto the ledge, drop down onto the next ledge and immediately duck the spear. Crawl to the right to the edge of the ledge until you're hanging on by your toe nails! That's the easy bit!

"The next bit is where the timing gets critical. Wait until a spear is coming towards you, then stand up and jump over the spear at the last second, landing on the first platform. While the second spear is overhead, run forward. As soon as it has passed, jump again onto the second platform. You should just miss the

third spear. If you don't, try experimenting on the second jump. It's easier if you jump diagonally upwards and then drop vertically downwards. Once on the second platform, shoot the wall to remove the spikes, and you're then almost halfway through level 2."

Thanks for the advice, Adam - just more proof that this is the computer mag with the best quality readers!

Ports of Call

"I'd like to shed some light on Steven McKinlay's problem with Ports Of Call described in March ACAR," the mysteriously named Maverick, of Croydon Park NSW. "It actually isn't compulsory to rescue the life rafts - all Steven has to do is to turn away so he doesn't hit them, and go full steam ahead!" Thanks for the tip, Maverick - but I'll bet there are a lot of little computer guys floating round who wish you hadn't passed on such a mean ideal

More on Rick Dangerous

Adam Wade, of Ridley-

ton SA, also offered to shed some light on the Rick Dangerous dilemma.

"Walk onto the stone that falls down, shoot the left wall (the one where the spikes come out if you walk over to it), squat down a couple of times then wait until it falls. Crawl out before it goes back up and you've done it," says Adam.

Over the Net

"I've got a tip on the game Over The Net," says Peter Lawrie, of Cleve, SA. "First, choose a one set game, play the sea-cup and enter one team or two hu-When it's man players. your turn to serve, move the non-serving player up to the top of the court close to the net. This will force one of the computer players to follow him. Now do a jump serve (push up and fire), then hit the ball to the other computer player by pushing right then down. The ball should drop between him and the net and he should miss the ball.

"Hopefully this plan should work. I don't know if it works with the other teams like Coco, Freaks etc but it works with the Rollers and the Golden Boys."

IMMORTALITY or how to live forever in games!

C64

Battle Valley

Surprisingly enough, some magazines didn't like this wonderful game, but I think it's still good even though it's old...Here's a bunch of tips I threw together a while ago, but never did anything with:

•POKE 16371,0 - Disable time

•POKE 26087, (0-15) - Change title colours •POKE 11612, (0-15) •POKE 11617, (0-15) - These two change the fore-ground colour •POKE 11341, (0-15)

•POKE 11346, (0-15)

•POKE 11351, (0-15) -These three change midground colours.

•POKE 11130, (0-15)

•POKE 11135, (0-15)

•POKE 11140, (0-15) -These three change background colours.

And after you've finished with that lot, type "SYS 25952" to see your technicolour masterpiece!

Ghouls 'n' Ghosts

Personally I don't think this conversion is as good Goblins, but it's all a mat- site direction ter of opinion.

Here are some tips I ALL monsters whipped up for this game that will help you get to the later stages (which are a bit cartridge owners only:

•POKE 11615, X: Where X want

•POKE 13857, Y: Where Y is the clock speed (1-

fastest, 255-slowest)
•POKE 13860,165 : Stops the clock

•POKE 18813,208 : Prevents meanies from hurting you, but still lets you bash the pixels out of 'em!

Ghost 'n' Goblins

Here are some pokes for the classic game itself. Undoubtedly Chris Butler's most triumphant programming effort:

•POKE 2175, X: Where X is the number of lives

•POKE 2198, C: Where C is the colour of the sprites •POKE 2203, Y: Where Y is the level you wish to start

•POKE 2214, W: Where W is any of the five weapons (1-5)

•POKE 2240, 9: Gives you nine minutes to complete a

•POKE 3901, 0 : Gives you unlimited time

•POKE 4170, 10: Stops

sprite collision •POKE 4242, 42: For smart

bomb •POKE 7086, 10: To make

the zombies jump around on Level 1 •POKE 7086, 0 : To allow

you to walk through zombies •POKE 7086, 15: To make

the zombies turn into bags when they appear

•POKE 7086, 12: To make zombies carry you the around

•POKE 7086, 13: To make the zombies fool gravity!

•POKE 7086, 1 : To make the zombies turn into spitting plants

•POKE 7488, 56: To make

as its prequel, Ghosts 'n' the plants spit in the oppo-

•POKE 7777, 0 : Freezes

•POKE 12707, 255 : Speeds up the game by 10!

•POKE 34042, 255 : To better). These pokes are for make the zombies bring up more pots.

Hmmm, now for a bit is the number of lives you about the program that I me a \$5 postal order (made

tle routine allows the user to play the music from just about any game on the market today!

And it explained how to find music in games ... Unfortunately it could not be printed due to space. So if you want to get your hands on this bit of coding, send wrote for this page! This lit- out to Damian Caynes) and

your address, and the disk will be winging its way to you in a few days! The disk also contains demos and a text writer written.

Send any hints and tips, letters, to:

> Slartibartfast 4 O'Connor Drive Bray Park NSW 2484

Send your authentic high scores to Phil Campbell, PO Box 23 Maclean NSW 2463. Please mark clearly whether your scores are for C-64 or Amiga. And remember NO CHEAT MODES ALLOWED!

AMIGA

ARKANOID 976,548 AMAZED 130,500 BATTLE SQUADRON 99,999,999(c) BEYOND ICE PAL.67,626(c) BLOCKOUT 85,281 BOMBJACK 200,680 BUBBLE BOBBLE 1,200,460 BUGGY BOY 103,350 CHASE HQ 5,504,010 CHASE HQ 5,304,010
CONT. CIRCUS 4,529,690
CRAZY CARS 86,064,640
CRAZY CARS 3,000,000,000
CRYSTAL HAMMER 43,847
CYBERBALL 475,000 DENARIS 53,900 DRAGON NINJA 246,400 DOUBLE DRAGON 124,630 **ELIMINATOR 246,570** ELIMINATOR 249,370 FLOOD 6,455 GEE BEE AIR RALLY 307,466 HYBRIS 1,826,075 IK+ 114,400 IMPOSS MISSION 66,380 INDIANA JONES \$ 1,420,450 KARATE KID II 54,000 LEATHERNECK 86,500 LIVE AND LET DIE 96,520 MAJOR MOTION 50,658 MENACE 996,481 MENACE 996,481 MIDNIGHT RESIST 228,755 MINDWALKER 306,214 MOUSETRAP 71,977 NITRO 233,000 (c) N. Z. STORY 546,695 N. Z. STORY 546,695
OPERATION WOLF 344,800
OUTRUN 26,331,122(c)
OFFSHORE WAR. 626,345
PACMANIA 3,250,140
PINBALL MAGIC 332,390
PINBALL WIZARD 171,150
PIONEER PLAGUE 35,412
PLUTOS 129,450
POPULOUS 307,860
POW 612,865
RAINBOW IS. 781,370
RAMPAGE 111,600
ROBOCOP 375,520
ROTOX 183,050(c)
SIDEWINDER 811,250
SILKWORM (Heli) 1,936,000 SILKWORM (Heli) 1,936,000 SILKWORM (Jeep) 622,500 SKWEEK 2,403,880 SPACE ACE 22,140 SPEEDBALL 17,650

Kamikaze Andy Chris Turnadge A Burbidge C. Turnadge Stephen Lark David Thompson V. v d Heyden David Thompson Angelo Augostis Amos Burbidge Kristian Wehner M. Summers David Thompson David Marsh Peter Evans **Rod Matthews** J. Knight Greg Munro Embah Beaton Kamikaze Andy **Embah Beaton** Scott Southurst D. Unwin Phillip Nicoll A G Smyth Michael Summers Shane Crosland Merekee Beaton Owen Webster Kamikaze Andy A. Augostis P. Schumacher David Rich Andrew Gormly Embah Beaton John Boyle Benjamin Moen J. Booth Amos Burbidge Tracey Chilcott Aaron Sanderson Keir Sooby David Rich Maverick **David Thompson** J. Beaton Kamikaze Andy Michael Summers Faye Doherty Amos Burbidge D. Everton **Daniel Everton Embah Beaton**

Neville Clarke

Amos Burbidge

STARWARS 5,722,822 STRIDER 113,950 SUPER CARS 17 races SUPER HANG-ON 25,042,850 SWORD OF SODAN 364,750 TEEN.M.N.T. 546,600(c) TEST DRIVE 131,076(c)
TEST DRIVE 2 309,397
TETRIS 10,101
TETRIX Level 232
THUNDERBLADE 336,520
THUNDERCATS 522,300 TOWER OF BABEL 25,934(c)
TURBO OUTRUN 100,260,819
TURRICAN 1,302,650(c)
TV-SPORTS F.BALL 189-0
TWINWORLD 24,640 **TYPHOON 54,255** VIRUS 14,576 WHIRLIGIG 28,210 XENON II 1,107,280(c) ZOOM 67,051

C. Mingos wave 33 Kamikaze Andy Maverick David Worthy Kamikaze Andy James Leeken Jordan Noglet **Charles Edmiston** Cheryl Marsh Stephen Lark Rod Matthews Scott Southurst Stephen Lark Matthew Mantle Stephen Lark David McKinney Carol Love Owen Webster Amos Burbidge Nathan Allen Mark Porta Steve Jones

COMMODORE 64

BATMAN 473,230 BATMAN 351,570 BANGKOK KNI. 36,800 BOMB JACK 344,560 473,230 BUBBLE BOB. 4,409,030(c) BUGGY BOY 119,510 CHASE HQ 9,220,121 DOUBLE DRAGON 30,660 DOUBLE D. II 255,190 FAST BREAK 136 to 9 GIANA SISTERS 105,200(c) GRYZOR 203,900 H. MARADONA Level M HAWKEYE 59,000 IKARI WARRIORS 267,800(c) INT. KARATE 139,300 LAST NINJA II 34.2 sec(c) OPER. WOLF 168,789 OUTRUN 6,438,787 PAPERBOY 103,100(c) POWERDRIFT 779,800 QUE-DEX 639 R-TYPE 1,280,500 RAINBOW ISLANDS 265,840 ROBOCOP 82,250 ROLLING T. 222,740 SALAMANDER 235,300 STREET FIGHTER 127,050 SUPER CYCLE 212,210 TEST DRIVE 36,144(c)
THUNDERBLADE1,734,040
THUNDERCATS 57,500 TARGET REN. 330,450 TRAZ 54,560 UNTOUCHABLES 70,230 **WONDER BOY 402.680**

John Nunes Joshua Smith N. Van Heeswyk J. Jacobs John Nunes John Nunes Joshua Smith N. Heeswyk Chris Byrne Russell O'Neill Paul Millward N. Heeswyk Nick van Heeswyk Iceman Paul Millward But how, Nick? Kishore Ludbey Kishore Ludbey John Nune Joshua Smith Chris Byrne Joshua Smith Melissa Worboys Tim Lockwood Iceman Paul Millward C. Byrne (clocked) Iceman John Nunes T. Morrison Chris Byrne
C. Byrne
Dave and Sue Upton
Simon Walford
John Nunes

Scores followed by (c) indicate that the game has been completed

Feel like a little horror? You'll need all the intestinal fortitude you can muster up as PHIL CAMPBELL takes on the latest release from Millenium...

popularised in the 1950s. It's a spooky action adventure spanning six levels, with nearly one hundred action screens on each level - but

only that's

on the B-grade horror movie genre fireplace. This takes me safely out of harm's way, and lets me grab the dagger hanging on the wall above.

Obstacle number one safely negotiated - now for a real challenge. The scuttling rats in the next room are deadly - one touch from them, and it's back to the title screen. With practice, I finally manage to avoid

them and reach the doorway at the far end of the screen, gaining a pair of "tippie-toe shoes" in the process. These are handy - activate them and you can sneak past the meanest spook undetected.

I arrive in the next room feeling a little over-confident. My passage is blocked by a huge, green gargoyle perched just beyond the door.

part of the story. The thing

into a frenas jagged fork of lightning crackles through the sky. Count Valdemar turns up his collar against the wind and the rain as he struggles to turn the rusted key in the huge iron gates. The hinges groan as they turn for the first time in decades. In moments, Valdemar is standing at the door of the foreboding stone mansion - his

wind whips

trees

family's ancestral home.

the

Valdemar had been curious when the Real Estate Agent refused to show him around - but now the hairs prickling on the back of his neck gave him the inkling of an answer. There is something decidedly spooky about the place. A sense of lurking evil.

He's absolutely right - beyond the heavy oak door there's an incredible array of ghouls, spectres, vampires and zombies wandering through the corridors of a house full of false walls, hidden doors and rotating fireplaces. Spooky stuff, but exactly what you would expect from a game called Horror Zombies from the Crypt.

Horror Zombies is based squarely

Horror Zombies infuriatingly good is the puzzles - almost every screen has a built in brain teaser that will torment you to the point of desperation.

Horror Zombies Crypt from the opens in the cinema. The lights dim, the velvet curtains sweep open across the screen, and the Amiga soundtrack perfectly captures the atmosphere of the era. I roll a few jaffas down the aisle, then reach for my joystick. The action begins.

Count I am Valde-Frederick

mar, handsome, fearless, and supremely foolhardy. The on-screen Valdemar is well animated - when I say "jump", he jumps, responding in-

stantly to my joystick.

Valdemar is in an ornate drawing room - surprisingly well kept for a house inhabited by spooks. Maybe they're house-proud. To the left stands an uninhabited suit of armour. Let's make that "presumably uninhabited." Suddenly, an eerie green zombie lurches onto the screen. As I soon discover, one touch from this guy leads to a gruesome death. But how do I avoid him? It takes me some time to realise I should follow him for three paces, then leap for the mantel above the

NONE

He's deadly - as usual, one touch, and it's back to the start. Next time I know better, and use the special shoes.

There's an identical gargoyle at the other end of the room, so naturally, I do the same. No-one can accuse me of being a slow learner. A frustrating hour later, I realise that Gargoyle number two is actually quite harmless. In fact, you need to push him aside to gain access to the next level.

In spite of many nasty twists like that - or maybe because of them Horror Zombies from the Crypt is a lot of fun. Graphics are detailed, animation is good, and the sound-track will keep you on the edge of your seat.

Distributed by: Mindscape 02 899 2277 RRP: \$59.95 Amiga also for Atari & IBM Ratings: Graphics: 78% Sound: 85% Instructions: 85% Overall: 82%

MEGADISC

. . when you're thru playing games

Toll-free Number for ORDERS ONLY: 008 22 7418

Megadisc was designed to help you really learn how to use your Amiga. Tutorials, articles, reviews, hints and tips, useful software, and much more are included to help both the beginner and the veteran to use the Amiga more productively.

Not too serious and not too lightweight, Megadisc entertains you while you learn. Available as single issues, subscriptions of any three or six issues (past or future), or as a Trial Pack (including MegaDos, our Amiga Manual-on-Disk and Megadisc 20, and our Catalogue-on-

Disk). If you get a Trial Pack, you can subscribe later for the lower rate mentioned below. Megadisc subscribers get lower prices on all our products, including the largest collection of quality public domain disks (almost-free software). Every Megadisc has the latest Virus-Killer update, and each Megadisc contains as much material as three of four conventional magazines, plus material available only on disk.

The Entire Megadisc Series

- Order Megadisc 1 ~ 20, Megados and four free Public Domain Disks for \$199!
 That's 25 information packed disks! You can order your PD disks later.
- AmigaDos Manual-on-Disk, with all you need to know about CLI, Workbench 1.2, 1.3
 and ARP described in layman's terms for \$19.95. Price for current subscribers \$13.95.

Trial Pack
Megadisc 20, Megados, and Catalogue-Disk for \$29
Past and current subscribers ~ RE-Subscribe for less!

\$45 instead of \$50 for a 3-Issue subscription (free PD incl.) \$80 instead of \$90 for a 6-Issue subscription (free PD incl.)

Public Domain Disks

For \$4.50 each ~ \$3.50 for Subscribers
All our Disks are fully described on our FREE Catalogue-Disk
Buy 10 PD disks, get one free ~ ie 11 PD disks for \$35 or \$45!
Games 10-Disk-Pack & PD 10-Pack for \$45 each
Our PD collection of 1500 disks contains databases, word-processors, spreadsheets, demos, graphics, and more! All disks are virus-free, and many are unavailable anywhere else.

Send to: MEGADISC, PO Box 759, Crows Nest Telephone: (02) 959 3692 (all hours) Fax: (02) 959 3525 Contributions of any kind are most welcome ~ please call

We do not charge for Postage and Packaging, and there are no hidden extras in our prices
We also take BankCard, MasterCard and Visa Orders by Phone of Fax.

I enclose a Cheque/Money Order for	
	Exp:
Please send me: • Catalogue-on-Disk AT NO COS	
Megadisc for \$90 (please specify)	(\$80 for re-subscribers
ANY 3 issues of Megadisc for \$50 (please specified)	
re-subscribers) • Megadisc 1 ~ 20 and MegaDos at	nd 4 PD disks ofr \$199 - The 4 free PD
disks I want (2 in the case of a 3-issue sub) are:	
OR please send your Catalogue-on-Disk now and I	will choose the remaining disks later:
• 10-Disk Game Pack for \$45 - PD 10-Pack in be	ox for \$45 🗌 • Beginner's Pack (3 Disk Se
for \$29) - Megados AmigaDos Manual-on-Dis	k for \$19.95 - For current subscribers
\$13.95 - Other Orders: Please attach	
Signature	
Name	
Address	
Telephone	Date:

AMIGANET

Ethernet network for Amigas

- Industry standard Ethernet Architecture.
- · Networking software included.
- True peer-peer Amiga Networking access any screen, hard or floppy drive, serial or parallel printer attached to any Amiga on the network.
- A500 version ABS injection moulded case connects to expansion port of computer.
- A2000 version enhanced with 64Kbytes data buffer with 16bit datapath assisted by a DMA sequencer. (For high traffic centralised facility or a file server.

AmigaNet A500 \$700.00 (ex tax) AmigaNet A2000 \$900.00 (ex tax)

GPTerm-Amiga V4

Australia's most popular Amiga telecommunications software

- Mouse or keyboard driven, fully multitasking from CLI or workbench, User defined 'configurations' for different services, 110 page manual and more.
- Full terminal emulations for videotex and ANSI/Amiga, IBM, VT100 ANSI terminal emulations for Viatel & Discovery 40/80, Pegasus and other text based services as well as BBSs.
- File transfer with XModem, YModem, full ZModem, SEAlink, KERMIT, Punter and ASCII protocols. Batch transfers supported.

Packaged with an extensive manual, not copy protected.

GPTerm-Amiga V4 \$99.00

Also available: Amiga and C64 Modem packages, GPTerm-64 (videotex and ascii communications for C64/128, rrp \$59.00). Full range of NetComm and AVTEK modems.

Available from your local dealer or direct from

GP Software

Specialists in Amiga Communications 21 Aloomba Rd ASHGROVE Qld 4060 Ph (07) 366 1402 Fresh from his encounter with a high tech MiG-29, flying ace PHIL CAMPBELL decides to try something at the other end of the scale - a Sopwith Camel...

as my Sopwith Camel cruises through the peaceful blue skies over France. Taking its name from the pronounced hump over the bulky engine cowling, the Camel is a real beast to fly - stub-

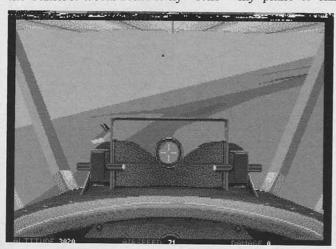
gravity. So far, gravity is winning every time.

There are various play modes, from dog-fights against a single enemy plane to fully fledged missions.

There's also a "strategy" mode, a unique feature for a flight-sim. Here you pit your wits against an enemy pilot using a combination of a traditional wargaming "hexmap" and a small showing animated "real-time" view from your plane. evocative of the era.

The wind rushes through my hair with the enemy - and the force of Next time I did better, and managed to claim one victim before I smashed terminally into the turf.

Blue Max will naturally be compared with Wings, a similar game released by the now sadly defunct Cinemaware Corporation. Wings features an almost identical World War I scenario, and a similar "seat of the pants" approach to the art of piloting. But there are differences. Blue Max leans much more heavily towards strategy. And Blue Max is more technical, offering a range of accurately modelled World War I planes to fly planes which are much harder to keep in the air. Wings, on the other hand, has the edge when it comes to atmosphere. Graphics are more detailed, and the sound track is more



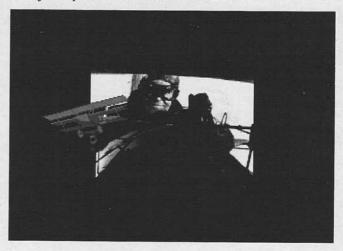
by airframe, front-heavy, with a tendency to nose-dive given the slightest opportunity. We're playing Blue Max, an accurate simulation of aerial combat as it used to be.

As a simulator, Blue Max is realistic - it offers few modern frills, and forces you to fly by the seat of your pants. Strictly low-tech, but the excitement is undeniable, with man and machine pitted in a deadly stuggle It's complex, but it should be rewarding in the

Missions start in the air - there's no take off sequence to worry though you will need to open the throttle a little before you try any fancy manoeuvres. Con-

trols are simple and direct - the plane climbs when you pull back on the joystick, dives when you push forward, and banks when you push left or right. Climb too steeply and the engine will sputter and die - more than likely, you will too.

My first dog-fight was a messy affair that lasted all of 30 seconds. I was blown out of the sky before I even saw the enemy Fokker Triplane.



In other words, it's a case of horses for courses. If you're looking for a tough game with lots of strategic challenge, try Blue Max. If it's softer entertainment you're after, Wings has a definite advantage.

Distributed by:

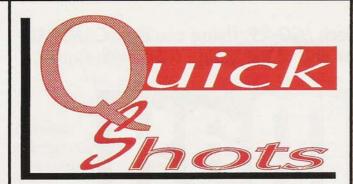
ECP 075 963 488

RRP:

Amiga

\$69.95





A quick look at what's new in the world of games



Ilyad is a classic shootem-up with real style. And tough! Boy, I can't even make it through the first level - but I intend to keep trying.

Right from the beautifully animated space voyager intro, the game has got real class. Graphics sparkle, enemy ships are fast and smooth, and razor sharp reflexes are the order of the day.

The story, if you're interested, is as follows: Baron Arkhon, a sinister tyrant, has imposed his law over the entire world, thanks to a time machine that lets him send his armies to conquer different eras through history. Your mission is to track down his forces and stop them to do it, you'll fly horizontally scrolling missions

through the eras of creation, prehistory, antiquity and the middle ages.

Well, okay, I know you didn't need to know any of that. The bottom line is Ilyad is a very playable space blaster with classy graphics and a not-tooboring sound track. Highly recommended.

Ratings:

Graphics 84% Sound 78% 85% Gameplay Overall 82%

Distributed by:

Questor 02 662 7944 RRP Amiga \$T.B.A. C64 \$T.B.A.





The longest Vietnam. and most controversial conflict in US history. The war that damaged the psyche of a nation so profoundly that minish as you suffer casuonly another war could repair it. A political minefield especially for anyone foolish enough to take on the job of President of the United States of America. That's YOUR job, if you're playing NAM. As invading Viet Cong guerillas fight to topple the South Vietnamese government, it's up to you to mobilise air units, set ambushes, protect Saigon and stay in power at the White House.

'NAM is a strategy game, pure and simple - but a reasonably well decorated one. At the political level, actions are initiated from a main menu - troop commitments, air support and other "budgetary" actions are set in motion by filling in appropriate numbers on the screen. Once approved by the Senate, your decisions are activated at the start of the next calendar year. Game time ticks over at any of three pre-set speeds and it's essential that you've laid your plans before December rolls around.

Military operations are carried out on a map display - units are displayed as boxes, which can be equipped with helicopters (if you've provided them as

president) moved around the map. As you collide with enemy forces, the size of your box will dialties - the idea, of course, is to obliterate the enemy boxes before they do the same to you.

There are a number of pre-set scenarios, which avoid the political side of the game - take control of forces at Khe San, or in the famous Tet Offensive.

This is a complex game, and you'll need to read the manual before you play. Military strategists will love it - others should approach with caution. Graphics are a direct port from the Mac version, and while they're obviously fine on the highres Mac screen they lose a lot in the translation. Richard Nixon's ugly mug is almost unrecognisable. Maps and other screens are much better, and overall the game presentation rates an okay.

Ratings:

Graphics 68% 71% Sound Gameplay 82% Overall 73%

Distributed by:

Questor 02 662 7944 RRP Amiga \$89.95



PRO **IEMMS**

Pro Tennis Tour was one of my all time favourite sport sims. The controls were fast and natural - so much so that you could almost imagine yourself running round the court. Now there's a sequel. Pro Tennis Tour II has a number of new features - for a start, you can create and save your own player. You can play almost any stroke, with increased options like lobs and smashes, and players can now move around the full area of the court.

The default game is a women's singles match, and the ladies certainly move round the screen with ease and grace. As soon as you pick up the joystick, you feel you can play - it's even more user friendly than Pro Tennis 1.

Creating your very own

Boris McEnroe is easy. A menu screen lets you set skill values for eight specific strokes - you start with 80 skill points to share around the strokes, and can only build up your characteristics by practising and playing matches.

Pro Tennis Tour II is hard disk installable - and it's already earned itself a permanent place on my dh1!

> Ratings: Graphics: 83%

Sound: 82% Gameplay: 86% Overall: 84%

Distributed by:

Questor 02 662 7944 RRP Amiga \$69.95 C64 \$ T.A.B.

FISTS

but what a great little packaction. What I am talking about is Fists of Fury - Edition 2.

Fists of Fury has a decidedly oriental flavour and just a touch of the lighthearted. All in all there are four games in this package, Shinobi, Ninja Warriors, Double Dragon II and Dynamite Dux. All those names should be familiar to lovers of action / violence / beatthe - life - out - of - the other - guy games.

If you're one of the few who are not familiar with these games, here's a brief rundown.

Shinobi - A group of children have been kidnapped and your mission (should you decide to accept it) is to rescue them - the use of excessive violence is encouraged.

Ninja Warriors - I'm not sure if there is a point to this game. It seems that you just have to be as violent as possible and your score goes up.

Double Dragon II - Marian has been killed and Billy and Jimmy have not taken

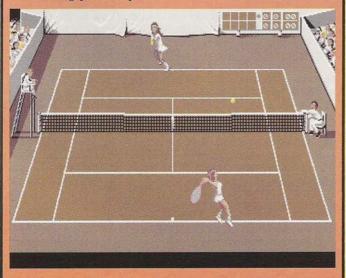
It may be nothing new her death very well at all -t what a great little pack- in fact they are out for reage - a veritable box full of venge. There is even a chance that if they are successful then they will be able to bring her back to life. Again violence is the order of the day.

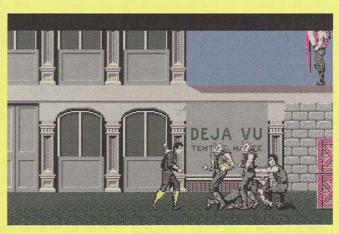
Dynamite Dux - this is the kind of game you would be happy for your younger brother or perhaps even your parents to play. Lucy has been kidnapped and your job is to get her back (sound familiar?) The really cute part about this one is the way these guys punch. They make Mike Tyson look like he isn't really try-

Luke Tattersall

Ratings: (average for all four games) Graphics - 76% Sound - 65% Gameplay - 78% Overall Value - 82%

> Distributed by: Mindscape 02 899 2277 **RRP** Amiga \$59.95 C64 disk \$39.95 C64 cass. \$29.95





"An absorbing diversion for players with an eye for detail." Thus spake DAVID GLOVER as he assessed this new Amiga game...

TARATHRUSTA all but

Alright Space Cadets, here's the scenario: The Resistance (that's us) is about to launch a major offensive against the Empire (that's them). In preparation for this, the Resistance have captured several star ships, but are lacking the essential power sources for these formidable craft, Klystron Pods.



Your mission is a simple one (in theory). Working for the Resistance, you are required to steal the pods from the Empire's storage planets. You must find the pod, hover just above it, activate your ship's tractor beam until the pod hooks on and

Ratings:

Graphics: 78% Sound: 76% Instructions: 82%

Overall:

79%

HEW50N

then thrust away skyward to the good ol' Mother Ship. Easy, eh?

There is at least one pod on each planet, either on the actual surface or cunningly tucked away in a cavern. The first trick is to simply find the thing (they look like spheres resting on plinths or monuments) and get a hold of it. Then it's "pedal to the metal" as you blast away to the sanctuary aboard Mother who will take you immediately to yet another planet where you start your search anew.

This has to be one of the most painstaking computer games I've played. You have a full screen in front of you: the programmers (the Whiz Kidz based in Europe) have thankfully used the PAL format - no missing third of a screen! Your ship appears as a small on-screen sprite floating in the black abyss of space somewhere above the planet.

A dab of thrust here, a tweak of steering there, and you'll be gliding and hovering to your heart's content. But beware, successful flying calls for the coolest and most sensitive

of hands. The controls are very touchy indeed. The slightest mistake or over-correction will see you plummeting to your doom on the planet's surface

Negotiating the caverns requires absolute surgical precision - it's almost like threading a needle sometimes. The job is not made any easier by the presence of a huge variety of what the manual calls "Obstacles" - 15 different types in all - some passive, some active and some downright 'ornery. The "obstacles" become more prolific and obstructionist as the game progresses over its many, many levels.

A blessed relief is the absence of a time limit, although you have a finite supply of fuel (refill tanks are available on the planet) and six space ships (lives) to play with. A small indicator panel at the top of the screen gives you the score and an up-to-date status on your resources.

You and your ship are not entirely defenseless. In your arsenal are Plasma Bolts, your main form of attack, and a Laser Scanning Device (LSD) which scans the cavern walls and destroys all enemies. The LSD is very effective, but also heavy on the fuel bill. Using the LSD with manic glee, I found to my dismay that it bled my tanks dry and I made an "uncontrolled flight into the ground".

Graphics on Zarathrusta are adequate, though unspectacular. Sound effects are good and loud, although a little sparse at times. An excellent sound track runs during the title screens only. Control options are either joystick or keyboard, although I found the latter far more effective.

Zarathrusta is for those with patience and perserverance, with a



steady hand and a cool head. It takes co-ordination, anticipation and a keen mind. Trigger-happy space cowboys looking for an *R-Type* or *Xenon II* will be disappointed, since this game is simply not designed for that sort of action.

While Zarathrusta will not go down in history as an Amiga games classic, it's an absorbing diversion for players with an eye for detail and sensitive touch on the throttle button.

Blitzkrieg - Battle at the Ardennes is just one in a series of Wargames being distributed by a new UK publisher called "Storm Computers Ltd" - keep your eye on them. Wargaming and simulations are increasing in popularity

and becoming increasingly sophisticated.

Of course, these games aren't for everybody! Blitzkrieg - Battle at the Ardennes appeals to those with above average intelligence, razor sharp minds, brute cunning, and an appreciation of good timing and patience. Blitzkrieg -Battle at the Ardennes simulates one of the most decisive battles of World War II. On December 16th, 1944, coinciding with several days of bad weather, Hitler ordered di-

rective "Wacht am Rhine." The German plan was to weakened strike Allied lines in Belgium and Luxem-

burg and to break through and push quickly to the Meuse River to capture Antwerp. The capture of Antwerp was Liege and finally the the port city of

essential postto pone the invasion of Germany, and give the Fuhrer a chance to honour his

litzkr

promises of secret weapons that would win

the war. But the chances of success were remote. The Germans were desperately low on fuel and the Allies had firm control of the air, and strategic superiority in Eu-

One player, as either the German or Allied forces, can battle against the computer, or two players can face each other. There are a number of variables that can be set at the beginning of the scenario - such as the standard of intelligence reports, relative condition of forces and the weather in which the battle will be fought - to eliminate any unreasonable advantages between players or computer, and to provide an infinite range of battle conditions.

The map or battlefield is an area composed of 1700

hexagonal cells (hexes). Each cell is assigned a terrain type of mountain, plain, forest, city or Siegfried line. As the attacker, one moves his units around the map encountering and engaging units of the enemy. The various types of units - infantry, artillery, light and heavy armour - have combat strengths and movement abilities associated with

Distributed by: **Pactronics**

02 748 4700

RRP:

\$59.95 Amiga

Ratings:

Graphics: 62% Sound: NA Instructions: 88% Overall: 81%

them, which are modified by the terrain.

It is essential that you keep an eye on the terrain and your supply lines as you move about. Whenever a

Bored with board-based war games? Then this is just what you've been waiting for. Join ANDREW BAARTZ as he takes on the allied forces at Ardennes ...

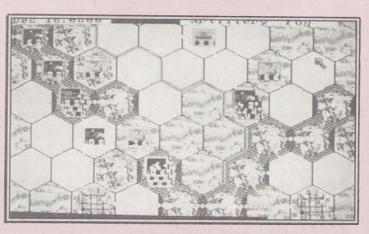
unit is adjacent to an enemy unit it can engage in combat, and a surprise encounter while you are vulnerable is

usually disastrous. Blitzkrieg - Battle at the Ardennes is simulations of a board game. If you've ever played these type of boards games - you'll find a computer version just heavenly. No more tables to look up. No more fiddly calculations. Truly secret moves! Possible move options highlighted in advance. Realistic use of terrain and intelligence. Warnings over illegal moves. And no disputes! (Because the computer's decision are final). Just the mention of these advantages will bring tears of joy to wargamers'

I'd never played the particular board game on which Blitzkrieg was based, so it took me about an hour to really get into the game and a bit of time browsing through the manual. I am glad I persevered - because soon I was leading the German assault towards Antwerp. The Allied airpower

gave me a bit of a hammering, but the overcast days protected me and my forces surged forward. Capturing petrol dumps and cities. Organizing V2 raids. And hoping for more overcast weather. Eventually my troops marched on the objective. The actual fight for Antwerp was long and bloody, but victorious.

Blitzkrieg is a winner. These military games are a sort of "Ultra-Chess." The challenge is irresistable!





This is a review of a compilation package of software called *Mega Pack* from Sydney company "The Gamesmen." *Mega Pack* combines two car racing games, an arcade movie spinoff and a golf simulation.

•Number 1 - Jack Nicklaus' Greatest 18 holes of Major Championship Golf. Like the car games, this golf



THE DUEL

simulation comes from Accolade. It's a couple of years old now, and not quite as polished and detailed as *Greg Norman's Ultimate Golf*, but still an excellent simulation that's fun to play. There is enough variety in the game to keep you interested for many long hours.

You choose whether you are male or female, beginner or expert. There are Pro, Mens, and Womens tees on each hole. For beginners the computer automatically selects a club for you, though you may change it if desired. Pros must always make their own choice.

You can play alone, or with a combination of several human and/or computer players. You have a choice of two real golf courses and an imaginary

course made up of Jack's favourite holes. Games can be saved and resumed later.

Jack Nicklaus' Golf is great fun to play, especially with a friend (or friends).

• Number 2 - Now for my least favourite, Ghostbusters II. Perhaps it's because I didn't see the second movie, but I don't seem to be able to get the hang of this one. And I mean hang. That's where you start. You're

on a rope, about to be winched through a manhole into the spooky depths below the streets of Manhattan. Your object is to make it through all the ghosties to the bottom of the hole and collect a sample of slime. I get to the bottom all right - at terminal velocity!

If you get through this section, there are two others, which no doubt make sense to you *Ghost-busters II* fans, but it's all Macedonian to me.

Now the car games. First is *Test Drive II: The Duel*. It's almost identical to *Test Drive I*, except you can choose to "Duel" with another car. You get a view of your instrument panel and the road ahead through the windscreen. You can also see the road behind in your rear mirrors. The steering wheel turns in the appropriate direction as you move the joy-

stick.
There are some nice opening graphics and SFX.
You get a choice of cars, including the

Porsche 959 and Ferrari F40. There are 12 skill levels, from beginner to expert. You can buy disks with extra scenery and cars.

The other racing game is *Grand Prix Circuit*. It operates exactly like *Test Drive*, except you pilot a formula one racing car around a Grand Prix circuit. The lower of the 12 levels have automatic gear changing. At expert levels it is possible to blow up



GHOSTBUSTERS

your engine, spin out, or do other damage due to bad driving.

You can decide how many laps in each race, and what type of car you drive, plus choose to drive in individual races, or the whole Grand Prix Circuit.



GOLF

With budget packs like this, you can't expect the year's latest releases. But what you do get is last year's great games, or this year's ordinary ones. With that in mind, The Gamesmen Megapack is good value. Both Test Drive II and Grand Prix Circuit are excellent games with a lot of attention to detail. The golf game with the long name is also a lot of fun. Ghostbusters II isn't great, but it's playable. So if you can only afford one game, why not buy four instead?



Distributed by: (exclusively)

The Gamesmen

Ratings: (Average)
Graphics: 74%
Sound: 73%
Value 87%
Gameplay 76%







GRAND PRIX

PHIL CAMPBELL takes control of the latest in Soviet military hardware as he checks out the flight-sim we've all been waiting for...



Even though Soviet military hardware copped a fair hiding in the Middle East, there's still a lot of interest in the MiG-29 Fulcrum, a nimble jet fighter producing speeds of Mach 2.2 at an operational ceiling of 16,800 metres. There's been an equal amount of interest in MiG-29 FULCRUM, the latest flight simulator from Domark software. My mate Ken Simpson is literally begging for the chance to try it out - and he will, just as soon as I've got it licked.

slide manoeuvre described in the manual. As usual, I had trouble even getting off the ground - so the fancy stuff can wait.

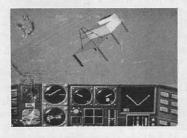
Cockpit instrumentation is completely authentic, and quite different in concept to the Western equivalent. The "Artificial Horizon and Turn" display, for example, shows your pitch and roll on the same dial, while the attitude meter features a moving plane silhouette on a fixed background - the western version features

fortunate "accident." Apology accepted, but it's up to me to arrange a few accidents in return. Next time they fly over the border, I'll be ready.

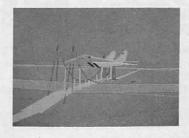
Taking off is easy - once you know how. Simply open the throttle, release the wheel brakes and you're trundling down the runway at an alarming speed. Pull back on the joystick and your nose rises gracefully into the air.

The manual strongly recommends controlling your MiG with a mouse simply pretend it's the top of a control stick, and move it accordingly. "A switched joystick," says the manual, "provides a crude but intuitive way of controlling the plane." Suits me fine - I'll trade crude for intuitive any day. If you're flying the IBM version, you'll be using a standard analogue joystick - probably the best option of all.

Moments after take-off from Tbliski, I'm flying high above the famous Great Wall. From this height it's more like a great line - just a black trace against the green of the earth. Suddenly, two Chinese planes appear yellow blips on the dark face of my radar screen. Selecting my AA-8



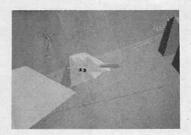
The trouble is, MiG-29 has a host of features, and a learning curve almost as steep as the 80 degree tail-



a fixed plane symbol and a moving background. Regular flight-simmers will find this a little off-putting at first

After a quick stint in the training academy, I was keen to try a full scale mission. Never mind the fact that I failed the training session real pilots might train for a full year, but they only have one life to play with. I can afford to be cocky. There are five missions to choose from, each with an authentic Soviet feel. I chose assignment "Yellow Dragon," a sortie in the skies above the Great Wall of China.

Chinese Shenyang fighters have been illegally intruding on Soviet airspace towards Tbliski aerodrome. When an aging Soviet Su-21 fighter challenged them yesterday it was shot down. The Chinese ambassador sent his deepest regrets for this un-

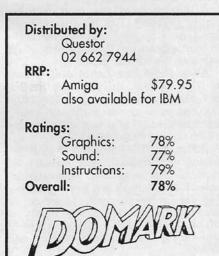


"Aphid" air to air missile, I lock onto my target and hit the fire button. Moments later, there is a puff of smoke on the horizon. Moments later again, I plough nose first into the ground.

Rule Number One. Don't watch puffs of smoke on the horizon. Watch your altimeter.

MiG-29 Fulcrum is a solidly built flight-sim, with plenty of features to play with - including "missile-eye views" of the action, just like the "slam-cam" coverage of the Iraqi decimation. On the Amiga version, graphics and sound effects set no new standards - adequate, but not brilliant. Even so, they don't spoil the flavour of the game.

Versions of MiG-29 are available for the Amiga and suitably souped-up IBM compatibles. \Box





Welcome once again to the dark caverns of The Realm - the place where adventurers all over Australia turn for help in their quests. If you are stuck in any adventure games, send your problems to the following address:

Adventurers Realm, 12 Bridle Place, Pakenham, Vic 3810

If role-playing-games (RPG's) are your kettle-of-fish then give Kamikaze Andy (alias Andrew Phang) a bell at:

The Dungeon P.O.Box 315, Maddington, WA 6109

Always enclose a stamped addressed envelope when writing to the Realm.



As promised, hint sheets for Castle of Terror and ZZZZZZ have been dropped from the list of free hint sheets. There are still a couple left over if you desperately need them.

With two hint sheets out of the door, we now have room for even

more new hint sheets:

Zak McKracken and Indy (Jones) .

Yes folks, the Lucasfilm games have been puzzling adventurers from all over Australia, so it seems fitting that these hint sheets are made available. You can thank Kamikaze Andy for the Indy hint sheets, and many many adventurers for the Zak hint sheet.

Readers of the Realm are entitled to up to four different hint sheets, as long as a stamped addresses envelope is enclosed. The only address to write to for hint sheets is:

Free Hint Sheets, 12 Bridle Place, Pakenham, Vic 3810

Guild of Thieves, Jinxter, Pawn, Zork I,II,III, Maniac Mansion, Bard Tale I,II,III, Hitchhikers Guide, Faery Tale, Hobbit, Never Ending Story, Fish, Deja Vu, Uninvited, Dracula, Borrowed Time.



More brainy adventurers to add to the ever-increasing list of adventure clever contacts. Always enclose a stamped addressed envelope when writing to a clever contacts.

Michael Walsh is a temporary contact until he starts uni next year.

His address is:

P.O. Box 136, Horsham, Vic 3400. He can help in: Zork 1-3, Stationfall, Planetfall, Starcross, Lurking Horror, ZZZZZ, Rigels Revenge, Bastow Manor, Adventureland, Pirate Adventure, Secret Mission, Pool of Radiance, Azure Bonds, Silver Blades, Hulk, Spiderman, and Dracula.

Bruce Gilbert of 88 Woodward Circle, Marangaroo, W.A. 6064 can offer help in: Larry 1,3, Shadow of Beast 1,2, Dejavu, Maps for Dungeonmaster, It Came from Desert, Ghostbusters II, Operation Stealth, Police Quest II, Heroes Quest, Mean-Streets, F19 Stealth Fighter, Immortal, Dragons Lair, KingsQuest 1,3, Space Quest 1,2, Uninvited, Shadowgate, Dreamzone, and Zak McKrack-

Finally, a very big thank you to out clever contacts, the unpaid workers who provide an excellent service to our readers. Good one, guys!

Firstly a very big thank you to: Stuart George (Springvale, VIC)

Michael Bathols (Narrogin, W.A.)

•Michael Walsh (Horsham, Vic)

 Kathy Kupresak (Bonython, ACT) for the enormous amount of hints sheets, solutions and tips kindly donated to the Realm. I am sure they will get many adventurers out of a sticky spot.

David Upton suggests that adventurers should exchange with each other completed adventure games. Sounds like a good idea, but I'm not sure it will do the deteriorating Aussie software market any good. I can't see any problems if the games are no longer available, though. What do other Realmers think?

\$1000 is what you can win by solving the C64/128 graphic adventure game - Space Explorer. The challenge has been set by Gary McCleary Software. Watch for the advert.

Also, there are continuing pleas for The Official Adventurers Realm Hint Book. It is out soon for only \$9.00 at most newsagents and computer dealers. If you cannot to seem to find it, ring (02) 398 5111.

Adam Read of Morphette Vale is shifting to England, and wanted to know if the magazine is available there. I don't think we have reached that far overseas....yet, however if you ring up Darrien Perry (thats a girl) on 02 398 5111 before you leave, I am sure a subscription could be organised.

Well & More Help or the Smart Adventurers Dept.

Many thanks to all the contributors to this section of the magazine. If you were stuck a little while back, then instant relief could be below!

Game: Aztec Tomb Adventure For: Mark Bilney (Feb issue - disguised as Jan issue).

From: Shelley Duval

Help: The rope can be found when you are still at the beginning, in the house. Go ladder, get chest, down, s, n, look bed, go trapdoor, look, get cloak, wear cloak, examine cellar, get key, open chest, get rope, get sword.

Game: Ring of Power For: Mark Bilney (Feb issue) From: Shelley Duval

Help: The game only flashes the password on and off just the once, and only if you start the game from scratch. Sometimes it won't show it at all. However, when on the final level you go to the shopkeeper in the far bottom right hand corner, he will reveal the password.

Game: Neuromancer

For: Colin Smith (Feb issue)

From: Alex Stivala and Stuart George **Help:** At the start of the game, use the PAX to send a message to Armitage which simply contains your ID number, and he will deposit 10000 credits in your account.

Open an account with the Bank of Zurich (link code Bozobank) then use the Tactical Police database to have Larry Moe arrested, so you can get to the Panther Moderns meeting room and talk to Lupus. Ask him about Gameinschaft, and he will tell you an account number which you can use to transfer money from Bank Gameinschaft to your account (link code Bankgemein).

Register yourself as an employee with Hosaka to pick a week's salary, and by using the cyberspace database you can get 500000 from the Bank of Berne.

Game: Asylum

For: Scott Pitcher (March issue)

From: Alex Stivala

Help: To stop the exterminator from

fogging the pestilence, you must tie him up with the rope. The rope can be found in one of the corridors.

Games: Pro-Pack Adventurer Games **For:** Brian Blackwell Jnr (Feb issue)

From: Stuart George

Help: In *Temple Curse*, to cross the pool, just say ROW and a direction.

In Last Planet, to look at the drawing try climbing the stalagmite. To get the rope you have to cut it.

In Island of Spies, get the parachute, wear parachute, pull lever, pull ripcord, remove parachute, and crawl out.

The Realm received a handful of problems this month, with games that until recently have been unfamiliar among these pages. If you can help these poor souls out - please do!!

Tony Pappas of Finley in NSW is stuck in *Strangeloop*. First of all, he would like to know how to get the Robot Manual from the litter Anti-Matter Man without getting killed. Also, what does he have to give the robot that waffles on about putting out brief candles?

• Julie Stearman of Blaxland in NSW wants to know how to deal with the Great Head in the game Wizard of Oz. Julie says at this stage of the game the parser becomes hostile.

• Getting out of the house is the problem facing Matt and Luke Walsh of Alphington in Victoria. The game where this house exists is *The Jet*-

sons.

 Jim Fang of Brentford Square in Victoria asks if anyone can help get past the Air-Level in the game Moebius?

• Lisa Ferraro of Mt Gambier is South Australia is really stuck deep in the Black Cauldron. Firstly, what does she do after the Gwydant has taken the cauldron? What does she do at the castle other than freeing the princess and the prisoner? What else does she do with Guigi other than give him cookies? Finally, what is something else she can give the witches besides the sword?

• Axl Batroc is having lots of trouble in *Neuromancer*. Trying to get Comlink V6 is becoming a real headache for Axl.

KICKBOARD

HOLDS BOTH YOUR KICKSTART-ROMS IN ONE EASY TO FIT QUALITY BOARD WHICH IS SWITCHED EXTERNALLY

TO SUIT A500/2000 KICKBOARD \$39-90

TRANSBOARD

USE YOUR EXTERNAL DRIVE TO BOOT OFF, SWAP INTERNAL V'S EXTERNAL JUST SWITCH AND RE-BOOT [Ctrl+A+A]. eight wires- requires good soldering ability.

12 MONTH TRANSBOARD \$49-90

Phone orders by Mastercard / Bankcard welcome
Post & handling add \$3-60 anywhere in Australia
order today-despatched today by Australia post
Proudly manufactured in Australia by Unitech
UNITECH ELECTRONICS PTY. LTD.
AUSTRALIAN COMPANY NUMBER 003864042

NDEPENDENT REPAIRS TO COMMODORE PRODUCTS
PHONE: 02 820 3555 10am-6pm
P.O. Box 137, MINTO. N.S.W. 2566

The Official Adventurers Realm Hint Book

Hints and tips on more than 40 games, by Michael Spiteri, whose "Adventurers Realm" appears every month in this

Only \$9.00 from newsagents and computer dealers

magazine.

Or from: Commodore and Amiga Review (02) 398 5111

Essential reading for adventurers - get your copy now!

AD. INDEX				
Amiga P D Ctr Briwali Brunswick Classified Ad's Commodore Computer Discounts Computer Spot Desktop Utilities ECP/EA Fonhol G P Software Hard Disk Cale Harris Hi-Tek Interlink Island Software Kawal Leejan Logico Logico Gary McCleary	53 17 8 79 36,37, 51,21 0BC IFC, 47 28 29 30 31 32 9 10 62 44, 45, 46 10 22, 23 19 IBC 18 43 33 33	Megadisc Milersoft MVB Computers P C M Computers Pacific Microlab Pactronics Parcom Pelham Phoenix Power Peripherals Prime Artitax Quadrant Ramscan Rapisoft Regional Computers Rhythmic Byte Rod irving Sigmacom tuntech XEL	40, 62 6 7 49 35 4, 41 18, 32 32 50 3, 6 54, 55 38 2 11 32 2 11 32 11 32 4 4 4 4 4 7 7 1 4 4 7 1 4 7 1 4 7 1 4 7 1 4 7 1 4 7 1 4 7 1 4 7 1 4 7 1 4 7 1 4 7 1 4 7 1 4 7 1 4 7 1 4 7 1 7 1	

Kamikaze Andy

Well, the long awaited Amiga CDTV is almost upon us, and this month the Dungeon takes a look at the upcoming as well as potential RPGs that will appear on CD-ROM.

From all reports, there are nearly 100 software products for the CDTV within the first three months of its release, half of which are games. It is important to note that because of the unusual input device the CDTV uses (an infra-red remote control just like your VCR or TV controller), there might be some modifications made to the first few games on offer.

Later in the year, Commodore will bring out its mouse and keyboard options for the CDTV (both of which will also use infra-red input technology). This is good news, because most of us know that complex adventures and roleplaying games require mouse and keyboard to operate efficiently.

First wave

Well, what are the first adventures to be released? From Cinemaware come CDTV conversions of Defender of the Crown and It Came From The Desert. Both will be direct conversions of their Amiga originals, but will feature CD audio, digitized speech instead of text responses, and in the case of the latter game, digitized film footage of real live actors!

According to Cinemaware, this will be the trend for the "First Wave" of CDTV games. They will be direct conversions of established titles, but with added music, complete speech dialogue, and digitized stills. (Ed: Late reports indicate that Cinemaware is now defunct - let's hope these games

Second Wave

At this stage, companies are trying to fill in the 500MB of CD space with such enhancements. When the "Second Wave" of games arrives, CDTV owners will get more original products that will make further use of the (hopefully by now released) mouse/ keyboard.

Origin will put out a CDTV version of its spectacular space-combat simulator, Wing Commander, by the end of the year. Ultima VII is due for CDTV sometime next year, as is Wing Com- only for adventurers.

mander II. Sierra's upcoming releases like Leisure Suit Larry V and Police Quest III (due at the end of 1991) might be CDTV candidates.

More definite games include ICOM's Sherlock Holmes: Consulting Detective, FTL's Dungeon Master, Lucasfilm's Indy and the Last Crusade (with film clips of Harrison Ford as Indy!), and the Broderbund Carmen Sandiego series.

An original adventure game due out soon is Detectron, from Defender of the Crown designer - Kellyn Beck. This game is a detective adventure, and like others mentioned above, features digitized footage and lots of digi-

tized speech.

Because Detectron was designed with the standard CDTV remote control in mind, the options are a little more limited than in other games. For example, each screen will have three options that you can select via remote control, and only three options. The storyline will develop as you get further into the game (something like a Choose Your Own Adventure system). Beck emphasizes that Detectron is an "exploratory" game, giving users the chance to see how the mystery turns out differently with each choice.

Success Factors

The eventual success of the CDTV format will hinge on the speed at which Commodore can produce two

The first is greater software support (although many companies have signed up, some giants like Electronic Arts are still wary of CDTV). A strong advertising campaign and, more importantly, consumer support from Commodore itself is vital for healthy CDTV sales.

The other important factor is how fast Commodore can come up with its promised CDTV converter for current Amigas. With over two million Amigas sold. Commodore can make a much better case for more software support if it can show that there are potentially two million CDTV owners out there already with the release of the CDTV adaptor.

Commodore also needs to release the mouse and keyboard options for CDTV very soon, as the remote control input device is very limited. I can hardly imagine how something as complex as SimEarth can be comfortably handled with the remote control

CDTV is an exciting prospect for all Amiga and computer owners, not

Social Ph

For the Commodore 128 and IBM-PC. Available via public domain.

Did you know that really good text adventurers still exist? The public domain libraries are full of them, and if you are looking for a good example of one then get your hands on Social Phobia, written by regular Realmer Alex Stivala and his merry crew.

This adventure should please science fiction fans, as it is based around two Mars satellites whose inhabitants are constantly at each others throats. On one side you have thetrendy fearful Phobians, and on the other you have the ugly looking Demonic merphs.

The war between the two races does not involve physical weapons,

but psychological ones.

Anyhow, it becomes apparent that the Phobians are losing, and they need more brainy beings to help them in the war. In their quest for more brains, you somehow get teleported from your Volkswagon.

So, you think the aim of the game is to help the Phobians succeed in their plight against the merphs and become the greatest hero since Flash

Gordon?

If you are looking for a good text adventure then check out Social Phobia, written by regular realmer Alex Stivala and his merry crew.

Wrong! You decide to wimp out by not getting involved in this alien mind feud, and work out a way to return home. So begins the game of Social Phobia. The game is just pure detailed text with some humour scattered here and there. It features a full sentence parser, and a fairly reasonable vocabulary. There are not too many locations to visit, and the problems vary from straightforward to downright dif-

My main criticism is that the play does tend to get knocked off fairly eas-

ily without much warning.

This game will probably only set you back a few dollars, and will supply you with many hours of fun and frustration. It most certainly gets the Realm's seal of approval!

Making Music is easy with the KAWAI FunLAB MUSIC SYSTEM

INTRODUCING THE
COMPLETE MUSIC
SYSTEM FROM KAWAI



- No technical knowledge of MIDI is required to operate the software.
- No external amplification is needed.
- System operates on Ámiga 500, 1000, 2000 and 2500.



THE KAWAI FunLAB MUSIC SYSTEM

HERE'S WHAT YOU GET...

KEYBOARD-

A 61 note keyboard with full size keys (colour colour co-ordinated with the Amiga), built in stereo speakers, 100 different studio sampled instrument sounds, 100 accompanying rhythms, programmable One Finger Ad Lib feature, and lots lots more.

SOFTWARE-

Steinberg FunLAB software is a 5 track sequencer (allowing overdubbing and multitrack recording) with music notation display, song lyric display, jukebox feature, optional 'quantize' or error correct and three demonstration songs.

MIDIINTERFACE - Compact MIDI interface which fits directly into your Amiga serial port.

MIDI CABLES -

Two MIDI cables for connecting the KAWAI keyboard to the MIDI interface.

AVAILABLE FROM:

Computermart Pty Ltd, WA (09) 328 9799 Computer Discounts, NSW (02) 281 7411 Hard Disk Cafe, NSW (02) 979 5833 Chanticleer Computer Centre, NSW (067) 72 8888 United Computers, Qld (072) 82 6232

Casino Computers, NSW (066) 62 5220 Stephens Music Centre, NSW (047) 51 6196 Master Systems, Vic (03) 720 6722 Gray's Music, NSW (065) 72 1611 Norsoft, Qld (077 43 4777)



Or contact: KAWAI AUSTRALIA PTY LTD **PO BOX 189** WATERLOO NSW 2017 PH (02) 663 0571 FAX (02) 662 4726

DEALER ENQUIRIES WELCOME

COLORBURSI

24/48 BIT GRAPHICS/VIDEO ENGINE









16.8 MILLION COLORS ON YOUR AMIGA

- · REALTIME IMAGE PROCESSING

- REALTIME IMAGE PROCESSING

 1.5MB DISPLAY RAM
 ON-BOARD GRAPHICS PROCESSOR
 HIGH RESOLUTION 768 X 580
 PROFESSIONAL BROADCAST QUALITY PRODUCT
 PURE RGB OUTPUT ENCODE TO ANY
 FORMAT TOTALLY GENLOCKABLE
 INCLUDES 24 BIT PAINT PROGRAM
 LOADERS FOR IFF FILES, SCULPT, DIGIVIEW,
 24 BIT RAY TRACED IMAGES, IMPULSE,
 DRAW4-PRO, BLITZ BASIC PRO, etc.

- COMPATIBLE WITH ALL AMIGA MONITORS NTSC/PAL/SECAM COMPATIBLE PROGRAMMABLE THAU COPPER, BLITTER, INTUITION 24 BIT DOUBLE BUFFERED ANIMATION AT 201ps

- 24 BIT PALETTE MAPPING
 COMPLEX COLOR CYCLING AND VIDEO EFFECTS
 REAL TIME HORIZONTAL AND VERTICAL SCROLLING
 24 BIT STENCIL CAPABILITY ON DUAL PLAYFIELDS WITH
- FREEDOM TO MIX AMIGA AND COLORBURST GRAPHICS

M.A.S.T.

MEMORY AND STORAGE TECHNOLOGY PL

19-21 BUCKLAND ST, BROADWAY 2007 Ph; (02)281-7411 Fax: (02)281-7414 © U.S.A. (702)359-0444 GERMANY (0221)771-0918 SWEDEN (40) 93-1200